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ABSTRACT

In the United States of America, there are about 35 separate Children's Museums; in the rest of the world, hardly a dozen. In Europe there is one. Yet many museums in Continental Europe, in Great Britain and the British Commonwealth, and in the Americas do provide for children in a variety of ways. How museums of different types, including Children's Museums, provide for children is the subject of three reports from these different geographical areas. Class visits and leisure-time visits by children, schemes for loaning collections to schools and youth organizations, and facilities for handicapped children are topics discussed. The use and misuse of labels, models, films, lectures, publications, and questionnaires as educational aids are presented. The location, physical characteristics, organization, sponsorship, personnel, and contents of museums in the Americas are noted. The observation is made that where Children's Museums are most successful they are least like museums and most like Youth Clubs. It is also observed that, not only are most existing museums unsuitable for children, they are also unsuitable for adults--and for the same reasons. A list of museums conducting children's work and a bibliography are given. (MF)

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GERMAINE CART, MOLLY HARRISON, CHARLES RUSSELL

MUSEUMS
AND
YOUNG PEOPLE

THREE REPORTS

with a foreword by GEORGES-HENRI RIVIERE
and an introduction by PETER F. MUD

ICOM

1952

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MUSEUMS AND YOUNG PEOPLE

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MUSEUMS AND YOUNG PEOPLE

THREE REPORTS

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FOREWORD

ICOM has always given special attention to the problems of children and museums, and in 1948, with support from UNESCO, it decided to publish a report on them.

The preparation of this publication has met with many difficulties. We originally planned a world-wide survey; it is not perhaps surprising that this was soon seen to be too ambitious. We had hoped that it could be written by a single author; it was soon found preferable to divide the work among three rapporteurs. We intended that, at the least, the three reports should conform to a common plan; but the material conditions and the theoretical approach differed so much from continent to continent that even this proved impossible.

We hope that, now that the publication is finally ready, it will prove useful. Though, for reasons outside our control, it draws very little from the experience of the Eastern countries, it nevertheless covers a very wide field and ranges over Western Europe, the British Commonwealth, and the New World. The authors of the three reports have attempted to give a critical account of practical work of which they have had first-hand experience, rather than lengthy analyses of the theoretical issues involved; and if their ideas differ, readers in the various countries should find them the more interesting. The introduction was not commissioned till the three reports had already been written. It might therefore, have been nothing more than a chairman's after-dinner speech: in fact, it is a most important chapter in the volume, and its great merit is that it harmonises and fills in the legitimately varying points of view of the other three writers, and does so with both gravity and wit.

These problems concerning children and museums are by no means as straightforward as they seem, as witness the extraordinary contrast between the proliferation of Children's Museums in the United States and their almost complete absence elsewhere.

Moreover they are the subject of much discussion and disagreement between museum officials and educationalists all over the world. It is our earnest hope that the three reports and the introduction, however provisional may be their conclusions, will form a valuable contribution to this continuing debate.

Two of ICOM's international committees — the Education Committee and the Children's Committee — concern themselves with the problems raised in this publication. Let us trust that, as a result of their joint efforts, more and more museums become aware of, and fulfil, their responsibilities towards the younger generation, and more and more children come to learn from, and enjoy, their treasures.

GEORGES-HENRI RIVIÈRE
Director of ICOM.

INTRODUCTION

IT is no exaggeration to say that the dominant trend in museum development over the past 30 years has been the increasing emphasis on the educational role of museums, and, as part of this, on the responsibilities of museums towards children.

Before the 1920's few museums made special provision for children. To-day more and more curators are finding themselves compelled — some willingly, others reluctantly — to appoint special staff, and even to set up special Departments, to deal with children's activities, and those who hesitate or refuse to cater for children are in danger of being labelled as hopelessly reactionary and old-fashioned.

The pressure which has produced these developments has usually come from outside rather than inside the museums — from enthusiastic educationalists and teachers, rather than from professional museum workers. Consequently many curators have been pushed into work with children without any clear idea of its limitations and possibilities, and often with considerable scepticism as to its value. Older museum officials are puzzled by the new-fangled educational activities of their younger colleagues, while the latter are left to devise and carry through their children's programmes with little guidance or interest from their superiors.

In this situation nothing but good can come from the widest possible dissemination of the experience already gained. This varies greatly from country to country, and discussion of it can, therefore, only be really useful if it is carried on on an international level. I.C.O.M. is the only body which can initiate such a discussion, and the main task of this publication is to provide some sort of basis from which it can proceed.

The present is a peculiarly suitable time for such a publication. In the United States of America children's activities in museums have been a matter of regular practice and thought for over a generation. In the rest of the world, with a few notable exceptions,

organised children's work in museums has only recently been started. Consequently, while the Americans are now for the first time beginning to be able to make a long-term estimate of their work, and to sort out the solidly worth-while from the ephemeral and trivial, museums in other countries are still in a position quickly to adapt their own techniques and programmes so as to profit gratefully from American mistakes. Our task therefore is to marry the mature experience of the Americans with the neophyte enthusiasm of the rest.

The three reports which make up the bulk of this book give a comprehensive, though necessarily brief, survey of the practice of museums in their work with children in the New World, the British Empire, and Continental Europe respectively. They deal primarily with practical day-to-day problems, and raise theoretical issues only in passing. Moreover, the views which they express are deliberately representative rather than personal.

By contrast the task of this Introduction is quite different, and is, in a sense, a residual one. Instead of a comprehensive survey, it deals only with certain specific topics. These have been selected as being those which raise in the sharpest form the fundamental theoretical issues which must underlie all museum work with children, and which are at present the subject of controversy and disagreement — particularly disagreement in current thinking between country and country. In effect this means focussing attention on just those marginal points at which agreed principle and practice give way to doubt and uncertainty. It follows that the views expressed are personal rather than representative, speculative rather than circumstantial, and tentative rather than final.

The topics which have been selected for consideration are the following :-

1. The Danger of Separate Children's Museums.
2. Exhibition Problems in Work with Children.
 - (i) The Neglect of Permanent Collections in Favour of Temporary Exhibitions.
 - (ii) The Excessive Use of Explanatory Labels.
 - (iii) Exaggerated Logic and Comprehensiveness in Exhibitions.
 - (iv) The Misuse of Models.

3. Teaching Problems in Work with Children.
 - (i) The Over-Regimentation of School-Parties.
 - (ii) The Misuse of Questionnaires.

1. *The Danger of Separate Children's Museums.*

In the United States of America there are about 35 separate Children's Museums. In the rest of the world there are hardly a dozen.

This striking discrepancy is partly the result of the simple fact that the main growth of the European museum systems took place at a time when little emphasis was being placed on the educational functions of museums, whereas the period of most rapid expansion in America came a generation later and therefore coincided with the development of interest in the responsibilities of museums to children. It is also to some extent a reflection of the unusual importance which American society generally gives to the child. Nevertheless, it is mainly the result of a genuine divergence of opinion as to the value of separate Children's Museums.

Let us first analyse the arguments put forward by those who favour separate Children's Museums. Their case rests on the basic assumption that the standard adult museum cannot be expected to cater satisfactorily for children, for many different reasons.

In the first place the physical environment of an adult museum can hardly avoid being irksome to children. The need for keeping the exhibits behind glass frustrates their natural desire to touch and handle them and quickly extinguishes interest. The need for preserving the quiet decorum legitimately demanded by those using the museum for study and research frustrates their natural high spirits and capacity for spontaneous enjoyment and enthusiasm. Even the normal height of showcases and the size of labels may well be unsuitable for smaller children.

Secondly, and more important, the type of material to be found in adult museums, and the normal methods of displaying it, are unsuitable. The need for assembling comprehensive type-series in such fields as natural history, geology, ethnography, and archaeology, and for arranging the material in accordance with accepted scientific classifications, inevitably produces a display which would be practically meaningless to a child. Moreover,

descriptive notes and labels addressed to an adult audience will almost always assume a prior knowledge, a capacity for inference and comparison, and a power of concentration, which are quite beyond the average child.

Finally, and most important of all, the professional and technical training and qualifications required of museum curators are likely to unfit them for understanding the point of view of a child or for interpreting their material to children. Therefore even if, theoretically speaking, the other disadvantages could be overcome, there is very little reason to hope that existing museum staffs will in fact overcome them, or will even be aware of the need to do so.

Even the most enthusiastic advocate of separate Children's Museums does not claim that all these disadvantages must always operate, or that all adult museums are necessarily useless for children. What they do claim is that the needs of children and the needs of scholars are so different that the former can always be better met by the establishment of a separate institution devoted exclusively to them than by some compromise which tries to satisfy both without in fact satisfying either.

Let us now analyse the arguments put forward against separate Children's Museums.

Their opponents admit at the outset that most existing museums are unsuitable for children. They are, however, equally unsuitable for adults — and for the same reasons. The setting up of separate Children's Museums therefore avoids the real issue, which is, how to change existing museums so that they become useful to adults and children alike. If an antithesis is made between the needs of young children and the needs of scholars and research workers, it is indeed possible to build up a case for separate museums; but such an antithesis is misleading, for a museum which caters only for research is not (except in the case of specialised University Museums) fulfilling its responsibilities. The really significant comparison should be between the needs of children (and particularly of adolescents) and the needs of the uninstructed general public; and it will be found that these needs, so far from being conflicting, are almost identical.

All the arguments which are adduced to show that the average museum collection, as normally presented, is uninspiring and even unintelligible to children, apply equally to the ordinary adult visitor. Many investigations into the reactions of the latter have proved beyond doubt that they are quite as lost as any child could be

when confronted with the usual routine museum display. They may have a greater fund of knowledge to help them in interpreting labels and drawing inferences from the museum specimens, but this advantage is counter-balanced by the school-child's extra receptivity and freedom from self-consciousness. In some ways the adult is even less equipped to enjoy himself and to profit from museums visits than is a child, for he may well be — perhaps only half-consciously — oppressed by a sense of frustration, and even of guilt, at his own ignorance, without being able to fall back on the unsophisticated curiosity and wonder of the young. If the reaction of the average visitor actually found in our adult museums is so negative, how much more discouraging would it be if we could test the potential reactions of that great majority who never think of visiting a museum at all.

There are a few museums — the Soane Museum in London is a clear example — which can never be made intelligible to the uninitiated, and there are some subjects — such as the Principles of Atomic Energy or the Development of Design in Japanese Sword Guards — which no museum could hope to make simply intelligible. But the great majority of museums must hope that the great majority of their material can be made intelligible to the uninformed visitor. This means in practice that it must be presented so simply and clearly that it will incidentally be intelligible to a child. If this is so, then the establishment of separate Children's Museums is a grave disservice to the cause of museums progress as a whole, for it means that skill and enthusiasm that might be used to improve existing Museums for the benefit of both the general adult public and children, are drawn off and diverted to the benefit of children alone.

This argument is strongly reinforced by the fact that almost all separate Children's Museums find themselves handicapped by a shortage of really good specimens, and have to make do with inferior, second-rate, examples. It can hardly be otherwise, for the funds at their disposal for purchases do not usually compare with those available to adult institutions, collectors are unlikely to entrust their treasures to them, their staffs, being less specialised, are less well-equipped to search out and to identify authentic specimens, and — perhaps the greatest difficulty — they are simultaneously more liable to attract, and less in a position to refuse, useless, unwanted, material. It must be admitted that there are one or two Children's Museums which do include among

their collections excellent, and even rare and important, specimens, but in these cases one often feels that the specimens could be of much greater use if made available to a wider public in an adult institution. However, Children's Museums with such resources are the rare exception, and it is far more normal to be confronted with the wasteful and paradoxical position of a group of enthusiastic and skilled curators in a Children's Museum manfully improvising with inferior material, while a fine collection stagnates uselessly in a neighbouring adult museum for the lack of intelligent presentation and display.

For one very good reason, European Children's Museums, if established, would probably be even worse off for material than are their American prototypes. Every European visitor must have noticed the important part which the Red Indians play in all American Children's Museums, and the skilful way in which they are used in the teaching of geography, history, anthropology, sociology and art. They form a ready-made means of linking the child's natural love of romance and adventure to a clearly established material base. At the same time as being strange, wild and remote, they are nevertheless close enough to be quite tangible and real, and they have left behind them quantities of authentic but cheap specimens in the form of costumes, tools, weapons and so on. In no European country is there anything equivalent, and the poverty of material in European Children's Museums would be that much the greater.

A further, more theoretical, argument is sometimes used against Children's Museums, particularly in Europe. It is mentioned in the European report, which refers to the Swedish emphasis on the belief that museums must never forget that all children in due course become adults. In this generalised form this argument is somewhat metaphysical and it is a little difficult to see what is really meant. If it means that separate Children's Museums tend to surround their children with a world of make-belief and fantasy which is a poor preparation for the realities and hazards of adult life, then it is unjust to the majority of American Children's Museums. These certainly make use of the young child's capacity for fantasy — in play-acting, imaginative drawing, story-telling, and so on — but in ways that are directly related to the material world — whether of man or of nature — and the very reverse of escapist. If it means that the provision of separate Children's Museums may give children the impression that

museums are only for children, and thus inhibit them from visiting them in adult life, this is an argument that can only be confirmed or refuted by empirical observation, which unfortunately has not yet been undertaken on any convincing scale. American museum workers admit that adolescents often keep away from Children's Museums which they previously frequented, on the ground that they are "only for kids", but other evidence shows that if tactfully handled they can easily be persuaded to graduate to the adult Museums, and will then quickly find themselves at home as a result of their previous experience at the junior institution.

A related criticism is that the segregation of children in separate museums prevents them from gaining the intangible benefits of actually working alongside, even though not necessarily together with, adults. Every teacher knows how depressing it is that so many children believe that learning is something that only children are forced to do, something that you need never again bother with after leaving school. An afternoon sketching in the galleries of an adult museum where scholars are also working, will do a lot to break this down, and may even transform it into a dawning realisation of the real meaning of learning and knowledge. This possibility is largely lost in a separate Children's Museum.

A more tangible criticism is that one of the main hopes for the future of the Museum movement generally is that children will persuade their parents to visit museums, and that this is less likely to happen if different institutions are provided for the two generations. Here again empirical evidence is lacking, but the argument carries conviction.

A final administrative, but nevertheless serious, criticism, is that the establishment of Children's Museums almost certainly perpetuates the inadequacies of the adult museums against which they were originally a protest and a reaction, for it conveniently confirms the opinion of those curators who hold that their adult museums have no responsibilities towards children. Curators who have hitherto felt a little uneasy about the uselessness of their museums to children, may now sit back with a clear conscience, secure in the belief that this particular task should be, and no doubt ultimately will be, taken over by a separate Children's Museum.

All these criticisms, when added up, make a formidable case against separate Children's Museums, and go far towards explaining the scepticisms and hesitancy generally felt about them in Europe.

It might be thought that these largely theoretical objections would not carry much weight in face of the overwhelming practical evidence that most of the separate Children's Museums in the United States are extremely successful and popular. Paradoxically, however, their very success is itself one of the factors reinforcing the general European scepticism, for it is suspected that it is due to entirely extraneous factors, and throws no direct light on — and can certainly not be taken as a reliable index of — the logic or otherwise of the original establishment of separate institutions.

It has to be admitted that this original establishment has not normally been preceded by a close examination of the arguments for and against Children's Museums. Usually a band of enthusiasts has gone ahead, in the knowledge that it is often easier, and always more rewarding, to set up a new institution than to attempt to improve, and perhaps transform, an old. Moreover it must often, initially, have seemed feasible to set up a new Children's Museum without too heavy an outlay, and, in any case, it is notoriously easy to interest philanthropists in projects dealing exclusively with children. Once they have been established, they naturally tend to continue and to multiply, for they have met needs previously unmet, and harnessed energy previously wasted, and this has seemed an adequate reason for supporting them.

In addition, the staff of Children's Museums will almost certainly be more socially conscious, and therefore more publicity-conscious, than the average scholar-curator of an adult museum, and Children's Museums, once founded, can therefore be relied on to get their full share of publicity. Furthermore, in a country where emulation between city and city is as strong as in the United States, the success of one or two Children's Museums naturally leads to a demand for their establishment elsewhere, and communities feel that they are lagging behind if they remain without one.

In another sense, also, Children's Museums tend to produce their own *ex post facto* justification. In the face of the indifference, suspicion, or veiled contempt of some of the older and more learned institutions, their staffs develop a common loyalty to Children's Museums as such, reinforced by the comforting feeling that they represent the youngest, and therefore the most progressive, wing of the museum profession. The resultant solidarity throws up its own spokesmen and apologists, who have provided Children's Museums with an integrated body of doctrine and belief. Moreover — a most important point — the mere existence of a group of

separate institutions catering exclusively for children tends to attract to them all those museum workers who are most actively interested in museum education.

It can be seen, therefore, that there is some justification for the European view that the success of these American institutions is due to extraneous factors, and cannot be used as an argument in favour of the general establishment of separate Children's Museums. And yet one cannot help feeling that this criticism does not really dispose of the issue, and that it is unfortunately buttressed by a strong feeling of "sour grapes"; for no fair-minded European who has visited the American Children's Museums, and who has had a chance of comparing their galleries, full of busy and enthusiastic children, with the empty and soulless halls of many European Museums, can doubt for an instant that Europe has a great deal to learn from them, or that the general European suspicion of them includes an element of envy at their bouncing, extrovert, self-confidence.

Perhaps the solution to this paradox lies in the fact that the most self-confident and successful activities in most American Children's Museums are just those which, in a sense, lie outside the range of the criticisms which we have listed. It is such activities as the dramatisations of Red Indian life, the field-trips made by the Junior Naturalists Clubs, and the painting and modelling classes, that most impress the European visitor, and it is significant that these are just the activities which have the most attenuated relationship to the normal functions of museums, and which stand in least need of extensive or important museum collections. In fact many of these activities — especially as carried out by the younger children — hardly require the use of museum specimens at all. Their success depends far more on the provision of spacious, friendly, premises, and — most important of all — on the personality of the adult group-leaders, than on any access to collections, and they often differ very little from similar activities carried on elsewhere — and often in America itself — by non-museum bodies such as Boy Scouts, Community Youth Centres and similar voluntary organisations.

On the other hand, the aspects of American Children's Museums which are most likely to discourage the European are just those which attempt most closely to imitate the functions of adult museums, namely the permanent displays in which curators have tried to eke out inferior specimens with pretentious captions, or

where a miscellaneous collection of dolls and tourist souvenirs has been presented as if each were a rare and precious treasure. In fact it would almost be true to say that — with the exception of the two or three largest and richest institutions — separate Children's Museums in the U.S.A. tend to be lively and imaginative in inverse proportion to the importance of their permanent collections. Those which possess practically no specimens of importance are compelled of necessity to rely on their ability to keep the children interested and busy through what may be termed extracuratorial activities, while those which are saddled with valuable but unrepresentative collections, or whose galleries house expensive and all-too-permanent dioramas, habitat-groups and the like, may find themselves too preoccupied with these to be able to pay sufficient attention to the children.

It is, in fact, difficult to avoid the conclusion that so long as they are solely engaged on the organisation of activities for the younger children — activities which are much closer to the work of the Youth Clubs than to that of adult museums — Children's Museums can hardly avoid doing good, and that there are many purely circumstantial advantages in their being organised and housed separately from existing adult institutions. On the other hand, the needs of the older children and adolescents are different, and it may well be that they can only adequately be met by an organisation which can make use of the scholarship, the standards, and above all the objects, which only adult museums can supply.

In practice this means the establishment of Children's Departments within existing adult museums. From the arguments which we have already put forward, it follows that they should be staffed by educationalists rather than by academic specialists, and that they should *not* have control of separate children's collections (except, of course, a small collection for direct demonstration purposes) nor attempt to organise special displays for children, whether permanent or temporary. On the other hand it is essential that they should be brought into active consultation on all matters concerning the display of the collections, and also that they should have their own offices, and, especially, their own work-rooms, and demonstration room or lecture theatre. It is in such a combination of separate staff and accommodation, with joint collections and exhibitions that the solution surely lies.

It remains to refer to one particular type of separate Children's Museum, which, though catering for adolescent rather than younger

children, yet justifies its independent existence on rather special grounds, namely the Children's Museum which is a repository of teaching aids rather than a museum in the ordinary sense of the word. There are several in the United States and one or two in Europe. Such museums have as their function the provision of teaching aids such as simple laboratory equipment, charts, maps, scale models, stuffed animals, fossils, geological specimens, coloured reproductions and the like, for use by teachers in the classroom. They usually also provide projectors, lanterns, film strips, lantern-slides, and gramophone records. It stands to reason that such centralised lending institutions can be of the greatest value in helping teachers to give added interest and vitality to their lessons, but it is also evident that they should not be classed as museums in the strict sense of the word. Even in the rare cases where the normal procedure is for teachers to bring their classes to classrooms established at the central depot rather than for the material to be sent out to the schools, the principle remains the same, and we are justified in treating them as a category apart. Their advantages are obvious, but throw very little light on the main controversy concerning separate Children's Museums as such.

2. Exhibition Problems in Work with Children.

(i) The Neglect of Permanent Collections in Favour of Temporary Exhibitions.

Every curator has to decide whether to concentrate attention on permanent or temporary exhibitions, for it is impossible to do both simultaneously.

There is always a temptation to give more attention to temporary exhibitions. In the eyes of trustees, members of committees, benefactors and the like, the vitality and usefulness of a museum is often measured by the number and success of its temporary exhibitions, and even the worst and most shoddily arranged temporary show is sure of a mention in the local press, whereas a major reorganisation of the permanent galleries may go completely unnoticed. Moreover go-ahead curators will naturally be eager to experiment with new ideas which can best be tried out in the form of temporary rather than permanent displays, and in the case of art museums, temporary loan exhibitions often offer the

delight of dealing with material of a higher quality than anything in the permanent museum collections.

This emphasis on temporary exhibitions is normally regarded as healthy and progressive, and it is, of course, true that there must be something wrong with a museum which never puts on such shows. Nevertheless, from the point of view of children and the uninstructed adult public which we have equated with them, it may well be a retrograde step.

We must make a distinction here between art museums and the rest. In the case of art museums the whole visiting public, including children, stand to gain great benefits from temporary exhibitions. In all art fields the finest objects are so rare and the enjoyment to be obtained from them is so much greater than from even the best second-rate examples, that, for the majority of museums, temporary exhibitions — especially those made up from material borrowed from private collectors — afford the only means of representing many aspects of art. It may almost be said that children outside capital cities are only able to see great works of art through the medium of temporary exhibitions.

The same is obviously not true for such subjects as natural history, geology, technology, ethnography, and so on. In these fields it is possible for many provincial museums to build up collections which provide an adequate representation. If curators of such museums have to choose between concentrating on temporary exhibitions or on their permanent galleries, then the latter is surely the more profitable procedure as far as service to children is concerned.

In the first place, visitors to temporary exhibitions expect something new, or unusual, or topical, which will provide the *raison d'être* of the show. Children, on the other hand, are best served by exhibitions dealing with the basic, the normal, and the established. For example, the fundamental subjects of local ecology — local fauna, flora, weather, industries, architecture, and so on — which should form the staple material of most local and regional museums, lend themselves much better to permanent than to temporary display.

In the second place, one of the great advantages of permanent displays is that they can be visited more than once and without special effort. In the case of school classes this is a decisive advantage; the visits can be arranged to suit the stage of development of the children instead of having to be made when

the class may be quite unprepared; the teacher has better opportunities of getting to know the display and preparing the visit accordingly; and — a very important factor — there is not the temptation that always exists in the case of temporary exhibitions of trying to cover too much in a single visit. How often has one seen classes of bewildered children being rushed round a temporary exhibition by a teacher who seems to feel that just because the objects will be dispersed next week, it is essential that all of them must be seen before it is too late. In the case of permanent exhibits this danger is nothing like so strong, and an intelligent teacher should have no difficulty in arranging for the children to see no more than is enough.

For the unaccompanied child the advantages of permanent exhibitions are just as great, for familiarity is a great help to the child who comes to the museum with a real desire to learn. He will get to know the arrangement of the galleries and the location of his favourite exhibits, and the knowledge that they will still be there if he comes again or takes a friend to admire them, is a powerful incentive to a further visit. If the well-known exhibits are being constantly removed and rearranged to make way for temporary exhibitions, then he will feel disorientated and deceived.

These arrangements apply at their strongest to shows which consist mainly of material borrowed from outside the museum. They admittedly do not apply with the same force in the case of those temporary exhibitions which are really nothing more than a small section of the permanent collections rearranged and temporarily displayed in a separate gallery. Many museums find that the prestige value of temporary exhibitions is so great that funds can only be obtained for the reorganisation of permanent collections if the reorganisation can in some way be made to look like, and for a time serve the purpose of, a temporary exhibition. Such a device is obviously justified and is not susceptible to the criticisms just enumerated. Moreover, the holding of such temporary exhibitions as a means of spot-lighting particular sections of the permanent collections has the great merit of combining the advantages of both freshness and familiarity, and is probably the ideal procedure as far as children are concerned.

(ii) *The Excessive Use of Explanatory Labels.*

This is another field in which practice in the United States tends to differ from that elsewhere. The difference is perhaps

traceable to the fact that most American museums have enough money to be able to recruit trained teachers and educationalists to supervise their work with children, whereas in Europe all that has been usually possible has been to hand this responsibility over to one of the existing curators. Inevitably, therefore, while American museum educationalists are likely to be up-to-date in their ideas, and in touch with current pedagogical theory and practice, their European counterparts often flounder along in bewildered isolation relying on educational theories which, having been already current for some 20 or 30 years, have just begun to seep down into the general consciousness of non-specialists.

In the field of exhibition-design this difference of approach becomes very noticeable. American workers have usually been through an educational training which will have continually emphasised current thinking on the advantages of active and participational methods of learning, whereas the academic and bookish training of the average European curator will have conditioned him to an almost unconscious belief in and reliance on the magic of the written word as the automatic basic of all teaching. This by itself would not be too serious were it not for the fact that once academic museum workers set about the task of producing didactic exhibitions, many considerations make it almost certain that this tendency to an over-reliance on written labels will be accentuated and exaggerated.

In the first place there is the natural reaction against the older method of showing museum objects with no explanatory labels at all. The young curator who has been disgusted by the uselessness of the traditional museum galleries and has been asked to take over the job of making them more intelligible to the general public and to school classes, will almost certainly feel that the first task is to provide each show-case with a general descriptive note and to intersperse the objects with maps, charts, diagrams, and so on. In the second place there is the anxiety of the average curator to demonstrate his own learning and scholarship. In small museums, where financial considerations make it difficult to improve the collections by intelligent purchase, and where the collections themselves are not remarkable enough to justify research and publication, the curator may have no other outlet for his scholarship than to compose long descriptive notes for the galleries. Furthermore many curators in provincial towns will naturally tend to model their display methods on those in use in the large national

and University Museums. As a result, small miscellaneous local collections will be supplied with a critical apparatus of labels and notes that would only be justified in the case of a systematic type-collection arranged for the use of senior research workers.

The cumulative effect of these factors is that in many European museums old galleries have been reorganised during recent years and fitted out with a formidable array of descriptive matter, excellently printed and tastefully disposed. The reorganisation has been acclaimed as a vast improvement on the old methods and as a triumph of modern Museography, and has no doubt excited the enthusiasm of trustees and committee members, and of visiting curators. But has it really made the exhibits more accessible and attractive to the average visitor, and have the labels and notes and charts and diagrams really been read and understood?

In many cases the answer can, unfortunately, hardly be in doubt. The average uninstructed visitor or child finds it difficult to concentrate for long on a book even when sitting down. How much less likely is it that he will be prepared to tackle what appears to be a similar task standing up; and even if he succeeded by dint of considerable concentration in working his way through an explanatory label on the chronology of the Ice Age, how much inclination or energy does this leave for the essential task of studying the objects. The matter would, perhaps, not be too tragic if the average visitor merely ignored the labels and went straight for the objects, but many people are so put off by the sight of large quantities of print that they will prefer to pass the whole exhibit by. The reaction is surely a natural one, for a child who is confronted with a closed group of a dozen objects, each briefly described, will feel some sense of satisfaction and achievement at the end of his inspection, whereas the experience of having glanced at a few labels and left quantities unread will leave everyone — and perhaps most of all a quick-witted and inquisitive child — with a feeling of frustration and incompleteness.

Even if we could be sure that the average visitor — or even only one or two among them — would read all the descriptive matter, would this provide an adequate justification for the copious explanatory notes that accompany so many didactic exhibitions? Surely not; for an exhibition in which the labels are read like a book, with the objects intruding like occasional illustrations, ignores the whole purpose and possibility of visual display, and is based on a misunderstanding of the functions of a museum. The primary

task of a museum exhibition must surely be to persuade people to look at the objects, and everything else must be subordinated to this. Admittedly, everything must be done to make the objects more interesting and intelligible, but as soon as the ancillary material becomes an end in itself and diverts attention from rather than to the objects, it defeats its own end.

This point is true enough for the general public, but it is doubly true for children, and particularly for adolescents. All teachers know that the requirements of the examination system make it almost impossible to avoid an over emphasis on the book as a source of learning. The museum is one of the few institutions that can help to counteract this bias by using material objects to appeal directly to the senses and emotions without the necessity for verbal mediation. So soon as the museum attempts to display its collections on the model of an enlarged illustrated book, it forfeits this great advantage and loses its special opportunity as an aid to learning and understanding.

(iii) *Exaggerated Logic and Comprehensiveness in Exhibitions.*

Directly linked with the problem of the excessive emphasis on explanatory notes, is the problem of the appropriate size for didactic exhibitions.

We have already referred to the sense of achievement and satisfaction that can come to a museum visitor, and particularly to a child, who feels that he has worked through an exhibition and mastered its material; and yet this is a satisfaction that is very rarely catered for in museum displays. The paradox of the situation lies in the fact that this fault can usually be traced back to precisely this same need for completeness on the part not of the visitors, but of the arrangers of the exhibition. In fact curators are allowed to indulge their own need for complete and comprehensive exhibitions, even if this means, as it almost certainly will, that the spectator is deprived of any chance of that rounded, digestible, self-sufficient exhibit, that would satisfy the same need in him.

In the case of curators this need takes two forms. On the one hand there is the urge to include too much material in the interests of completeness, on the other hand there is the urge to extend the field of the exhibition in the interests of comprehensiveness.

The danger of including too much material is perhaps the better recognised of the two, but it is reinforced by so many different factors that it is very difficult to avoid. The acquisitive instinct of the pathological collector must form some part of the psychological background of every successful museum curator, and this implies a strong compulsion to stuff exhibition galleries with too many objects as a means of showing off the wealth and range of the collections. The natural sense of orderliness and logic plays in the same direction, and ruins many otherwise excellent exhibitions. How often, for example, have displays of 18th century drinking glasses or of ornamental horse-brasses been made completely indigestible by the urge to include a specimen of every known variation, and the same applies with equal force in the fields of anthropology and archaeology.

The danger of making the field too wide in the interests of comprehensiveness is perhaps more insidious. It is especially dangerous in small general museums and particularly affects those who attempt to rearrange the collections of local museums on progressive, didactic, principles. Many of these smaller museums contain miscellaneous collections of geological specimens, fossils, stuffed animals and birds, neolithic artifacts, Roman remains, mediaeval pots, and so on. At first sight it might seem wise to try and use the whole collections to tell the systematic story of the earth and life on it. Many local curators have started out on this prodigious task, intending to devote one room to the origin of the earth, another to the coming of man, and so on. Others, less ambitious, have limited themselves to the animal kingdom, starting off with the orders and families and hoping in time to cover the whole field.

In almost every case these ambitious efforts come to grief before they are completed, for lack of funds, or as a result of changes in staff; and the museum is left with a few cases, or at most a single gallery, that suddenly stops at the end of the Jurassic period or leaves out the Ungulates. But it is very questionable whether such a scheme would be advisable, even in the unlikely event that it could be carried through to completion. Its disadvantages for the casual visitor — whether adult or child — are very great, for it means that no object has any significance unless the spectator is prepared to study its precise place in, for example, the hierarchy of the animal kingdom. Labels and descriptive notes assume that the visitor has started his tour at

the beginning and worked right through, and no allowance can be made for those who come in by a different entrance or who want to move around the galleries at random. The disadvantages are perhaps less glaring in the case of conducted school parties, for the teacher can often limit the visit to that small section on which she wants to concentrate attention.

How much more satisfactory, however, even for school parties, are those general museums where the existence of miscellaneous collections has been used by the curator as a justification for dividing the galleries up into a number of unrelated, but compact, exhibits, each centred round some set of specimens in which the collections happen to be rich. Some fossils which would otherwise be thinly spread out in a vain attempt to represent the whole field of paleontology, are instead collected into a small exhibit illustrating "What are Fossils are Where to Find Them"; similarly, stuffed animals are no longer ranged along the walls in an effort to reconstruct the "Story of Life", but are used in small groups to represent such ideas as "How Animals Get Their Food", and the curator has no compunction in banishing some of his more outlandish specimens to the storeroom, and no regret that he is unable to exhibit an example to represent every known sub-species of the Muridae.

No adult or child who really wants to learn anything from a museum will find such a fragmentation of the collections a handicap, for, if the groups are well done, one, or at most two, of them will provide quite enough interest for a single visit, and their compactness will satisfy that sense of having learnt all about some subject — however small — which is such an important element in the enjoyment of learning. More comprehensive and systematic displays may satisfy the curator's desire for logic and symmetry, but the value of a logical sequence from object to object, case to case, and bay to bay, is completely lost if the normal visitor becomes exhausted after one of two cases at the most, and the existence of a rigid sequence can become a real hindrance to enjoyment if it means that the visitor is constantly being made aware that he has started in the middle or left out some vital step in the argument.

One final disadvantage of logical, comprehensive, didactic displays is that they are so permanent. Having once been set out, nothing can be changed without throwing out the whole sequence. The enlargement of a window, the removal of a radiator,

the gift of a new collection, will involve a major upheaval. In practice, of course, these changes are made, and the logical sequence goes by the board with disastrous effects, and for years afterwards bewildered visitors will be puzzled by instructions such as "compare specimens in adjoining wall-case" when the wall-case has long since disappeared.

What is needed is that those curators who have managed to get away from the over-logical, over-comprehensive, approach which we have been criticising, and who have succeeded in rearranging their collections in more self-contained and digestible units, should publish full scenarios of their displays (short generalised descriptions are no use in such matters) for the guidance of their colleagues. Only in this way will it be possible to break down the ingrained assumption of so many curators that the didactic value of a display must be measured in terms of the completeness of the material and the quantity of written matter accompanying it, and that the school textbook should be their model when preparing exhibitions for children.

(iv) *The Misuse of Models.*

Museum workers dealing with children are under a strong temptation to make use of models. Their advantages in terms of ease and security of handling, portability, and so on, are obvious, and it is not surprising that almost all didactic exhibitions include them, and that many school loan-services rely almost entirely on them and use them to illustrate such diversified processes as the working of a coal-mine, the digestion of a rabbit, or the lay-out of a Roman fort.

Though the use of models is still increasing, they are now the subject of a good deal of criticism and scepticism. This can be found on both sides of the Atlantic, but in rather different forms. American museums, with their large financial resources, have often been able to indulge in the use of models on a grand scale, and particularly in the use of the more expensive types of working models; and yet it is often just those museums which have previously made the most use of them, which are now most sceptical about their use with children, or, for that matter, with adults. In Europe, on the other hand, the use of any but the simplest models has always been limited, even in national

institutions, by financial considerations. Scepticism here, therefore, is based on far less experience than in America, though it must be admitted that this is often more than compensated by an element of *schadenfreude* at the thought that some of the more grandiose, and originally envied, American models have turned out to be white elephants.

The primary source of this scepticism is the belief that children should be confronted with the real and not the spurious. In its purest form this would mean excluding children from museums altogether, on the ground that as soon as objects enter a museum they become dead and falsified. At a less exalted level it means that it is better to take a party of school children to the local gas-works, however small and obsolete, than to see in the museum a model of the most up-to-date gas-works in the world, and that the dullest and most provincial 18th century chair should be shown to children in preference to a 20th century reproduction, however impeccable, of Chippendale's finest example.

Nevertheless, in the majority of cases the choice is not, as here, between the spurious and the real, but between the spurious and nothing at all, and in such cases we must be guided by less metaphysical considerations. One decisive criterion is whether or not the children realise the difference between a model and the real thing.

This realisation is by no means automatic. Casual comments overheard in natural history museums often disclose extraordinary gullibility, even on the part of adults, over such exhibits as enlarged models of insects, and it would be quite wrong to assume that young children easily grasp the idea that something is a model. There is also the reverse danger, that they assume that nothing in a museum is real. It would be interesting to test this point empirically, for it might well be discovered that present-day children, who are conditioned to regular cinema-going, tend to assume that the objects behind glass cases in a museum must be just as "unreal" as what they see on the cinema or television screen. At all events, whichever is the danger, it is essential that if models are being used with children, they should realise from the start just what they are.

There are only two satisfactory ways of ensuring this. Firstly by allowing the children to handle the models, and preferably to take them to pieces, and secondly by getting them to make models

themselves. As with maps, so with models; once one has been made, the principle is easily understood, but not otherwise.

There remain certain types of model which can hardly be made intelligible to children under any conditions, such as, for example, symbolic models. We have in mind, particularly, models which are really three-dimensional diagrams, such as those in which Mendelian theory is explained by a symbolic genealogical tree, or in which coloured balls are used to demonstrate the molecular structure of a drop of water. The difficulty is especially great in the case of models which rely on the use of a conventional symbolic notation, such as circles divided into coloured segments to compare proportions, or cut-out figures of varying sizes to represent comparative quantities.

The question of scale has a great deal to do with the intelligibility of models for children. A model, for example, of a viking ship, or a miniature diorama of Egyptians building the pyramids, is easily understood, for children are used to this degree of scale-reduction in toys. Quite different, obviously, is a scale-model of the planetary system, or, at the other extreme, of a protozoa, for in this case the child has no accepted yardstick, and the result will almost certainly be confusion.

Special difficulties arise in the case of working models. Many museums, particularly of science and technology, base their work with children almost entirely on the use of working models actuated by push-buttons, whereas many museum-educationalists deplore their use. Though children obviously love visiting galleries filled with such models, it only needs the most superficial observation to discover that they usually rush from one model to another, pressing the buttons furiously but hardly waiting to see the wheels go round. The dangers are obvious. They come to equate the museum galleries with a free fun-fair, and to despise any exhibit which is unequipped with a button.

And yet it would obviously be ridiculous to abolish all such working-models, for in many cases they provide the only satisfactory means of demonstrating a working-process. What is needed is that those museum-educationalists who have had long experience of them should attempt to answer some of the criticisms, and analyse which of their uses are valuable and which not. It would for example, be helpful to know whether models which depend on the operation of a handle or crank are less open to abuse than those worked by a push-button. Whether it is advisable to limit the

speed of operation, so as to prevent the temptation to set all the wheels racing to the exclusion of any understanding of the process. Whether it is legitimate to differentiate between models in which all the stages in the process can be displayed visually in miniature, as in a model of a water-mill, and those in which an essential part of the process has to remain unrepresented as in a model of an internal combustion engine in which the piston moves, but without an explosion. Whether there is any means of avoiding the confusion that arises with those models in which, because the working is activated by a small, invisible, electric motor, the process appears to be continuous and self-generating and the layman is unable to discover where the movement begins and ends.

These are technical matters which can only be decided by experts, but their solution affects a very wide range of activities in the field of museum education. Hitherto the scientists have tended to fill their galleries with working models and hope for the best, while the educationalists have become more and more sceptical as to their value, without being able to suggest practical alternatives. There is no subject that would better repay a close empirical investigation undertaken by both sides together, for more children willingly visit scientific and technological museums than all others put together.

3. Teaching Problems in Work with Children.

(i) The Over-Regimentation of School-Parties.

There is almost universal agreement among museum workers in condemning the old type of school-visit, in which the teacher takes a party of thirty or forty children to see, not any individual exhibits, but just "the Museum", or, worse still, "the Museums". The children — and often the teacher also — have no idea what they are going to see; they are herded into the first gallery they come to, they wander about bewildered and soon exhausted and return home having learnt nothing and enjoyed little. Though, unfortunately, many such visits are still made, they are the result of ignorance, and not conviction, and everyone who has given any thought to the matter agrees that they are useless.

Similarly there is general agreement on the prerequisites for the success of organised school-visits. The party must be small — preferably not more than 15 children. The visit must be planned

to fit in with the school syllabus, and should be discussed in advance between the teacher and the Museum's Children's Department. Its purpose should be explained to the children. On arrival they should be welcomed into a special Children's Room before being escorted to the appropriate public gallery. They should not be left there long enough to get tired, and should return home, or to school, stimulated and refreshed.

This is the ideal to which most museums are working. It is still so far ahead of, and preferable to, the actual practice in most museums, that it is accepted as the appropriate goal without much question. And yet there are several questions that should be asked.

Firstly there is the question of the proper use of the separate Children's Room, and the relation between it and the museum galleries.

Some museums regard the Children's Room as primarily a classroom. They deliberately equip it with desks and a blackboard, on the theory that children will concentrate better and learn more easily if they find themselves surrounded with the familiar paraphernalia associated with the process of learning. Once this step has been taken, it is natural to arrange for the major part of the visit to be spent in the classroom. Instead of the children milling round a show-case in the gallery, uncertain as to which object they are supposed to be looking at, and constantly distracted by the unexpected architecture and by trying to guess the identity and use of unknown exhibits, their interest is held by a few selected specimens which are available in the classroom and are held up for inspection or handed round to illustrate the particular point made by the teacher. Their whole attention can be concentrated on the lesson, instead of being dissipated in a vague, but fatiguing and unsatisfied, feeling of novelty and excitement. At the end of the lesson they may spend ten minutes or so in the galleries, but under conditions which enable the teacher to limit their attention to those exhibits which are relevant to what they have been taught.

This is the procedure favoured by many museums, and particularly by those which have comprehensive arrangements with Education Authorities, under which a steady stream of school-parties visits the museum as part of the syllabus. Such methods are naturally popular with the schools, for they enable whole classes, even of 30 or 40 children, to visit the museum at a time. They

are also popular with the Museum Authorities, for they keep the children out of sight of the general public for the greater part of their visit and thereby minimise congestion in the galleries.

Though museums working on these lines usually pride themselves on their efficient arrangements and enlightened approach, it can surely be argued that they are adopting a fundamentally wrong attitude to the whole problem. Most children who visit the museum in an organised school-party do so very rarely; perhaps once in their whole career, or once a year at most. The museum should therefore regard these visits as a great opportunity — the only opportunity it has — of inspiring children with the idea that museums are wonderful places, full of remarkable and interesting things. If the visit is merely treated as an occasion for imparting information to supplement that already gained at school, then its whole point is surely being missed. If, in addition, the museum especially emphasises the similarities between school and museum, it may be doing a positive disservice to the whole museum movement by reinforcing the impression that museums are places to which children have to go, but to which no-one, whether child or adult, would ever go for choice.

If this view is accepted, then the task should rather be to emphasise just those aspects of school-visits which differentiate them from other school activities in the eyes of the children, so that the museum visit, so far from fitting the normal classroom routine, stands out as a treat to be remembered and repeated.

In the first place this means emphasising the informal atmosphere of the Children's Room, by eliminating desks and arranging it so as to allow the children to move about, to ask questions, and to chatter. Quite apart from any value in itself, this has the great advantage that, having let off a good deal of steam, the children will be prepared for a little discipline when they move into the galleries, whereas if they have been cooped up in desks for half-an-hour or so, the transference to the galleries will come as a merciful release, with consequent difficulties.

In the second place it means relying first and last on the objects themselves, rather than on talking or showing slides or films. The museums's only advantage over the school is that it can provide real objects, and a visit that does not exploit this advantage to the full is virtually wasted. This does not, of course, imply that the Children's Room need be filled with many objects, but rather that the teacher's whole effort should be concentrated on persuading

the children really to look at and examine those that have been assembled. Ten minutes will be infinitely better spent in handling some ammonites, or taking to pieces a 17th century pistol, or drawing a stuffed weasel, than in listening to a talk about fossils or pistols or mammals in general.

In the third place it means that, despite the practical difficulties, enough time should be spent in the public galleries themselves to ensure that the children should carry away with them some realisation of the general value of the museum as a storehouse of treasures worth visiting for its own sake long after the school curriculum has been forgotten. This benefit is lost if too much time is spent in the separate Children's Room.

In the fourth place, it means the minimum of conscious direction in the galleries themselves. Many museums workers, in their anxiety to avoid the futilities of the old general tour, cause almost equal frustration by refusing to let the children examine objects which may catch their eye, and by closely shepherding them from object to object. Almost every museum displays in its entrance-hall some unusual, though probably irrelevant, exhibit, left there because it is too large or heavy to be moved. If the children's attention is caught by it, it will surely be wiser to allay their curiosity by a brief explanation, than to hurry them past, leaving them puzzling about its identity throughout the remainder of the visit. The plain fact is that the extent to which the children will be persuaded to pay attention to the objects they are supposed to be looking at, will depend not on the skill of the teacher in physically guiding them to the appropriate show-case, but on the extent to which their interest in the objects has been aroused by what they have seen and handled in the Children's Room. Moreover, the sense of individual choice is often decisive. It may be necessary for the teacher to direct the party to a particular show-case, but the children must then be free to examine which pieces they want without interference, for it is surely better that they should intently examine an irrelevant, but self-chosen, example, rather than gaze at the correct one, uninterested and unseeing.

The decisive difference between the academic, classroom, approach, and the more informal approach just outlined, can be traced back to a disagreement as to the primary function of museum visits. The academic approach regards them as supplementing school-lessons by providing information not readily obtainable in the school-room, whereas the informal approach

assumes that the function is to provide a new experience, different in kind from anything available at school. To put the matter concretely, the one hopes that a visit to a Museum of Roman Antiquities will add to the children's knowledge by enabling them for the first time to understand the lay-out of a Roman fort and to recognise specimens of Samian ware, whereas the other does not worry too much about the amount of *new* information accumulated, but tries to use the visit to give life and dimension to the information already gained from books, so that the children realise, perhaps for the first time, that the Romans about whom they have been taught were real people who once lived in their own town and had similar tastes and needs to their own.

It may be argued that such an informal approach may well be advisable in the case where the class is paying a single visit to the museum, but that the academic approach is the correct one where regular, even if fairly infrequent, visits are involved; for in this case the sense of delight in exploring a new world can be concentrated into the first visit, while the subsequent visits are devoted to helping the children to get the additional information that they need if a continuing interest is to be aroused. Though this may well be so, such a procedure still does not avoid a further more insidious danger, namely the danger of treating museums as if they were merely repositories of teaching aids, or reference collections of specimens to be brought out for a moment to illustrate a particular point in a history or geography lesson.

This danger may not be important in the case of science museums — though even here it involves a real degradation of the full functions of a museum — but it is very serious in the case of Art Museums, for it implies an indifference to the essential fact that the value of the objects in Art Museums, by contrast with those in all other museums, lies primarily in their own intrinsic merit and beauty, and only secondarily in their function as illustration and evidence.

It follows from this basic fact that if children are taught to look, for example, at an 18th century embroidered waistcoat in the same spirit in which they would examine a penny-farthing bicycle, namely as evidence of the quaint habits of our ancestors, then they are missing much of the *raison d'être* and almost all of the pleasure, of a visit to an Art Museum. An intelligent teacher will avoid this danger and will see to it that her legitimate

desire to use the waistcoat as material to forward a classroom project in 18th century social history, does not blind the children to the fact that it is an object of beauty to be enjoyed in its own right, and is displayed in the museum for that reason. However, this will be made much more difficult if the school-visit is treated like a classroom lesson, and if the objects are brought out for inspection at a particular point in the proceedings as if they were pieces of laboratory equipment and are quickly removed from sight as soon as their illustrative function has been exhausted. By comparison, what we have called the informal approach should make it much easier for the children to realise that they are surrounded in an Art Museum by objects which are quite outside their normal range of experience in the classroom, and to feel that the museum-visit has opened up to them the possibility of all sorts of pleasures of which they were previously unaware.

There are, therefore, strong and varied arguments against over-rigid methods in dealing with organised school visits, especially to Art Museums. It is true that at present the main danger is still that school-visits are too little organised and that the children's interest is dissipated for lack of guidance. But the establishment of special School Service Officers in Museums, and the blanket-co-ordination of visits between the Museum and the Local Education Authority, in some cases even over the heads of the teachers, is spreading so rapidly that before long the danger of too much codification and uniformity will be much the greater. museum specimens will be in danger of being relegated to the status of mere "visual aids", and school parties will pass in succession through the museum classroom with as little flurry or excitement as if they were attending school prayers. To avoid such an outcome should be one of the main aims of all museum educationalists.

(ii) *The Misuse of Questionnaires.*

It is not surprising that many museums centre all their children's work round the questionnaire, or "quiz", for its advantages are obvious. It gives the child something to search for, and thus prevents the usual aimless wandering. It introduces an active element, and thus breaks the monotony of passive gazing. It helps to imprint on the child's mind the information absorbed, and it provides an objective test of the extent to which the child has actually looked at and understood the exhibits.

It is deceptively easy to introduce the use of questionnaires and to believe them to be successful. Their actual drafting does not take long. They are certain to impress a meeting of Trustees or Governors when quickly passed round the board-table, and they are almost certain to be popular with the children — or at least with boys. Unfortunately these criteria of success are no measure of their real value. An unpopular questionnaire is, of course, useless, but a popular one may well be equally so. Its real merits can only be assessed by a continuous and painstaking analysis of the use which the children actually make of it. Few curators can spare time for this, with the result that many museums continue for year after year to use, and be proud of, questionnaires that ought to have been scrapped long ago. The tendency to have them printed plays a part in this, for a busy curator can salve his conscience with the argument that it would be uneconomical to print a revised version while large stocks of the old remain unused.

Most museum-educationalists are agreed on one fundamental fact about questionnaires, namely that their primary purpose is not to fill the child with information, nor to extract information from him, but to persuade him to look at and understand the exhibits. The questions and answers have no value in themselves, but are merely a legitimate teaching device to concentrate the child's attention. Correct answers and high "scores" are therefore of no interest unless they are the result of a careful inspection, and some understanding, of the objects. In practice, however, it is very difficult for even the most enlightened curator to keep these principles clearly in mind, for there are a number of powerful factors pulling in the opposite direction.

Firstly, just because the questionnaire must be regarded as a means and not as an end in itself, it is important that the actual process of filling it in should be made as simple as possible. The questions should be so framed that the writing in of the answers takes the minimum time, thus leaving as much time as possible for the study of the exhibits. This would be advisable for adults, but is doubly so for children; for some children take an obsessional delight in filling in any form, and will spend the whole visit neatly printing their name and address and the answers to the first two or three questions, while others will be so intimidated by any form that they will only be able to fill it in if the answers can be monosyllabic. Consequently there are very strong reasons

for framing the questions so as to make the actual process of answering as rapid and painless as possible, and for making full use of the normal devices such as, "Put a tick against the correct word", or "Strike out those that do not apply". An additional reason for preferring such devices is that children wandering round a gallery with nothing stiff to write on can hardly be expected to fill in more than one or two words for each answer.

Secondly, this need for simple questions and answers is reinforced by the children's own psychological requirements. They like questionnaires precisely because they appeal to their love of competition (whether with others or with an ideal) and their desire for praise. The questions must therefore be framed so that the answers can be clearly said to be right or wrong, and so that the correct ones can be added up to form a "score". Everything points, therefore, to the need for precise, cut-and-dried, factual questions, which can be answered by "Yes" or "No", or by a name or a number.

These two considerations very much limit the didactic value of questionnaires. In the first place they make it difficult to include question that involve even the smallest amount of inference or deduction. For example, the bald factual question, "How many legs has a wasp?", is obviously less useful didactically, than questions such as "How is a wasp's nest constructed?", or "Where would you look for a wasp's nest near your home?", and yet the need for brief, cut-and-dried questions clearly puts a premium on the first question at the expense of the other two. In the second place it is even more difficult to include any questions that require the exercise of some personal choice, such as "If you lived in the Barbadoes, what job would you like to have?", and yet such a question would obviously be preferable to the factual alternative such as "Name three of the principal exports of the Barbadoes".

These disadvantages are serious enough, but they are far outweighed by a further factor, namely that the emphasis on factual questions inevitably turns the children's attention not to the objects, which should be the sole purpose of the questionnaire, but to the labels. This can hardly be avoided, for facts are much more readily obtained by reading the labels than by inspecting the exhibits. It might be thought that the one would automatically lead to the other. Experience shows that this is not so. As soon as the child has copied down the correct answer from the label, it passes on to the next label, anxious to make a record

score in the minimum time without bothering with the objects at all. Many museums completely ignore this difficulty, and happily hand out questionnaires which satisfy all the requirements of brevity and precision, but at the expense of framing all the questions in such a way that they can be answered by copying out the labels without any reference to the exhibits.

Some curators have realised this dilemma and have consciously framed their questionnaires with a view to ensuring that no question can be answered without actually looking at the object. This is, no doubt, a laudable procedure, but the result can hardly avoid being unsatisfactory for the simple reason that — at least in the case of scientific museums — all the important facts about the objects will be included in the labels, and the questions will, therefore, have to be directed to irrelevant secondary considerations. The result, therefore, will be a series of totally unrelated and deliberately trivial questions, such as: "What colour are the tail-feathers of the Black-Capped Kingfisher?", or "Which of these coins is decorated with an elephant?". There might be no harm in this were it not for the fact that the child will inevitably carry away a false impression of the significance of the questions. The curator may know that the actual questions are unimportant and are merely designed to compel attention to the objects, but the child will not (in fact if he did he would not think them worth answering), and he will certainly be confused as a result.

In practice the great majority of curators ignore this problem of label-copying when framing their questionnaires, and simply make a list of the most important facts about the exhibits and then transform them into questions, thus producing a questionnaire which reads exactly like the questions that so often appear at the end of each chapter in school-textbooks. In fact they ask questions which are appropriate to the classroom rather than to the museum. This usually involves a further disadvantage. As a result of that desire for comprehensiveness to which we have previously referred, the curator feels compelled to cover far too wide a subject in a single questionnaire, and thus either has to ask too many questions or else to spread them far too thinly through the galleries. Both alternatives are equally unsatisfactory; in the former the child is exhausted before the questionnaire is completed, in the latter he is bewildered by finding that each question relates not only to a distinct object, but to a distinct class of objects, and he finishes the series without a clear idea of anything.

Obviously the only solution is for the questionnaire to cover a very small segment of the museum — perhaps not more than two show-cases, and for several different questions to be asked about each selected object. At least the child will then be left with some definite visual impressions to take home.

All these considerations, when taken together, mean that it is almost impossible to produce a questionnaire which is both practical and popular and yet conforms to the general principles that ought to infuse all progressive museum education. And yet many curators will continue to use them on the grounds that they are a useful help in keeping the children out of mischief, and cannot do much harm. Admittedly the positive harm which they can do is not very great in the case of Science Museums, but the situation in the case of Art Museums is quite different.

Whereas label-copying in Scientific and Technical Museums is merely wasteful, in Art Museums it is positively pernicious, for it gives the child the impression that the important thing about the picture is the name and date of the artist. So many educated adults go round Art Galleries carefully studying the labels but giving the actual pictures nothing more than a knowing nod of recognition, that all Art Museums should make it one of their primary tasks to fight against this attitude in children. Questionnaires, however, can hardly avoid reinforcing it. Moreover, whereas in Science Museums they can at least draw the children's attention to the most important facts about the objects, in Art Museums they cannot help concentrating on the most irrelevant ones, such as biographical details of the artist's life, or the technical processes involved. In fact the average Art Gallery questionnaire will contain questions such as "Which French artist left Europe and painted in Tahiti?", or "Who first discovered porcelain in Europe?", or "What is Cuir bouilli?", but nothing about the actual objects.

A few curators attempt to get away from these extraneous facts, and ask questions involving considerations of style; but the difficulties are very great. The questions must assume no prior knowledge on the part of the child, and can therefore only extract from him what has been absorbed from the actual exhibits. Consequently they have to be phrased on a very elementary level, and usually end up with such banalities as "A Gothic arch is round, humped, pointed, square? Underline the correct answer." A more sophisticated device is to arouse an interest in style by

the use of matching puzzles and the like, in which the recognition of stylistic similarity can be tested without the use of words. The danger here is that the children concentrate entirely on the doing of the puzzle as such, and hardly pay any attention to the content of the answers, just as it is possible to complete a jigsaw puzzle without noticing the final picture.

In the last analysis all these difficulties resolve themselves into the fact that, however skillfully they are worded, questionnaires cannot avoid encouraging a series of basic misconceptions about art. Firstly they give the impression that it is the extraneous facts about the objects which are more interesting and important than the objects themselves. Secondly they imply that there is a cut-and-dried answer about each object, instead of emphasising that all art objects require a personal judgement and choice. Thirdly they lead to the belief that objects in Art Museums are there to be learned about rather than to be enjoyed. No tricks of presentation or phrasing can alter these contradictions.

The arguments which we have brought forward against questionnaires, whether in Scientific or Art Museums, apply primarily to those which are intended for the use of isolated children who complete them individually. Admittedly different considerations apply in the case of questionnaires for the use of organised school-parties. The main difference is that in the case of the latter it is possible to bring into the questionnaire not only the bald facts found on the labels and in the objects, but also any general information which the teacher, or museum-educationalist, may have imparted to the class in a preliminary talk. This is a very great advantage, for it makes it possible to frame the questions in a much wider context, and thus to avoid the dangers of mere label-copying. Moreover, if the questionnaire is freshly drafted for each individual party, then it should be possible to frame the questions round a specific, limited theme, and thereby get away from the usual string of unrelated factual details. Perhaps the ideal arrangement is to have four or five separate questionnaires each covering one aspect of the subject, to distribute each of these to one group of children, and to get each group to complete its form as a communal task. Such an arrangement makes it possible to ask a series of questions about a single object or group of objects, thus ensuring that they really are intensively inspected.

Even if special devices of this sort are adopted, it is still doubtful

whether questionnaires are really suitable even for school-parties. If a party has been sensibly dealt with along the lines suggested in the previous section, not much time will be left for the paraphernalia of handing out the forms, explaining their function, filling them in, and collecting them up again, with the result that they will be completed in a great hurry as a race against time. Moreover the preliminary discussion and handling of objects in the Children's Room should have made unnecessary the main purpose of the questionnaire, namely to guide the children's attention to the right objects.

On balance, therefore, there is every advantage in the case of school-parties in dispensing with the questionnaire altogether. If it is felt that the value of the visit is dissipated in the absence of some written memento of it, then this purpose can surely be far better served by getting the children to write short essays on their trip and what they saw, when they get back to the class-room. The long-term didactic advantages of this method over the questionnaire as a teaching device are obvious.

In conclusion, therefore, we can hardly avoid agreeing with those museum-educationalists who regard the questionnaire with suspicion and scepticism. In the case of large national museums, which have to cope with the problem of hordes of unaccompanied children, it may well serve some purpose as a means of instilling order in the galleries. In the case of Science Museums generally it can perhaps play some part in helping the children to gain factual information, but at the expense of spreading a basically false conception of how to look at exhibits. In Art Museums its dangers undoubtedly outweigh its advantages. Its uses are strictly limited, and in no case can it legitimately claim to be regarded as a serious contribution towards the evolution of a new and progressive technique of museum education.

This Introduction has dealt with a number of specific practical problems. The justification for their selection is that they are all questions which must sooner or later face anyone who is concerned with museums and children, and, moreover, are all questions which raise fundamental problems concerning the aims of museum education.

If there is any consistency running through the views put forward on these somewhat disparate subjects, it arises from a

conviction that the greatest danger facing the museum movement in the future is not that museums will fail to appreciate their responsibilities towards children, but that they will interpret these responsibilities too narrowly and academically, and may forget that the specific ingredient which museums have the power to inject into contemporary education must be visual rather than verbal, and emotional as well as intellectual.

If this conviction has been expressed with an unbecoming assurance and dogmatism, this may, perhaps, be excused on the ground that all these problems are of urgent importance, and that on their speedy solution depends whatever influence museums will have on the coming generation.

GERMAINE CART

MUSEUMS AND YOUNG PEOPLE
IN CONTINENTAL EUROPE

WE would like to have been able to collect detailed information from all the countries of continental Europe. A summary of the aims and results of the Latin, Slav and Nordic countries would have given the reader, whatever his particular interests, a chance of finding an answer to the intricate problems of the relationship between young people and museums. Such a work would also have shown, by its very variety, what valuable instruments of culture museums that are capable of adapting themselves to many different needs, can be.

Unfortunately we were not able to make contact with all the countries of Europe. Therefore we have had to abandon our original plan and to be satisfied with what detailed information we have been sent or have been able to obtain at first hand.

The limited space at our disposal has obliged us to make a selection. Obviously we could not describe every experiment attempted in continental Europe, and we have therefore chosen to describe more fully those which seemed to us the most characteristic, and those which have the advantage of being easily carried out and being adaptable to differing circumstances.

A

CHILDREN'S MUSEUMS

Children's museums, which are numerous and well organised in the United States, are still rare in the countries we have studied. To the best of our knowledge there is only one institution which answers exactly to this description : it is the Museum of Education at The Hague which, in the way it is arranged and organised, is most useful to both teachers and children.

This institution was founded by private enterprise about forty years ago, and has been a municipal museum since 1920. It is housed in a building of its own in a working class quarter and it works in close collaboration with the schools of The Hague and the surrounding region. It is visited each year by an ever increasing number of school children, (more than forty thousand in 1947).

The collections, which are mainly devoted to natural history, are divided into different sections : e.g. geology, botany, sociology, ethnography, etc. Each section occupies several small exhibition galleries in which carefully labelled specimens are classified subject

by subject. Thanks to this classification and to the methodical presentation, lessons on a definite subject (for instance birds, reptiles, etc.) can be given in one room without unnecessary moving about and therefore without tiring the children or distracting their attention. A fine collection of specimens from the Dutch Indies, (costumes, weapons, tools, works of art), give the children an exact idea of this exotic civilisation and suggest interesting comparisons with their own. Finally, various scientific apparatus makes possible experiments in physics and chemistry in which the children themselves take an active part.

In addition to exhibition galleries, this museum also contains bright and cheerful class rooms equipped with projectors. Here the children are given short preparatory talks either by the teacher who brings them or by a museum lecturer. Thirty-eight subjects are available: the list, drawn up according to the requirements of the school curricula and the resources of the museum, is sent to the schools at the beginning of each year.

Outside these "guided activities" the initiative is left to the children who can come on their own and visit any galleries which have a particular interest for them.

To keep up interest in the museum and to encourage more visitors, temporary exhibitions of an educational nature are arranged two or three times a year, sometimes in collaboration with other organisations. These exhibitions, presented in a large gallery set aside for the purpose, have as their themes subjects likely to awaken the curiosity and increase the knowledge of historical as well as scientific subjects. For instance, after an exhibition on the Dutch Indies, an exhibition on the telephone followed to teach the children how this marvellous invention was made and developed, and at the same time to give a technical explanation of how it works.

It is unnecessary to insist either on the success of such an organisation with children or on its educational value. Even though the principle of children's museums seems debateable to certain people when it is a question of museums of art or history, there seems little doubt that institutions like The Hague Museum, which are relatively easy to organise, could render great services in science and natural history. At all events it would be a valuable help to smaller, poorer schools who have not the means to obtain those collections which are so necessary to make class lessons more real and more comprehensible.

B

OTHER MUSEUMS

In Continental Europe, generally speaking, the aim has been to try to make ordinary museums available to children rather than to create special children's museums. This state of affairs is partly explained by a theory often expressed in Sweden, a country which has been very much concerned with this problem for nearly a century. The child should be considered as a continually evolving being, "a potential adult": there is therefore no place for special institutions whose contents would soon be seen to be inadequate for his ever changing needs and his ever widening knowledge. On the contrary, it is very important to allow him to familiarise himself little by little with all the museums which are able to give him, in proportion to his increasing knowledge, elementary information in the sciences, in history, and in art. This method has also the advantage of putting the child or the adolescent in contact with original material and of giving him access to museums with greater resources for the presentation of collections than the smaller museum has at its disposal.

We shall not discuss here the advantages and disadvantages of this theory in comparison with that which advocates children's museums, but shall confine ourselves to describing methods used to put it into practice.

As the museums to which we shall refer were not established specially for young people, we shall not go into their practical organisation or the classification and presentation of their collections, though naturally, everything that can be done to make a museum pleasant and instructive is valuable for children as well as for adults. It seems to us more profitable to discuss the educational principles learnt by teachers through long experience, which will be useful to those who have to deal for the first time with children in a museum.

1. *Educational Services*

There is nothing new in the use of a museum in education: the Nordic Museum at Stockholm has been visited by school children since 1828, and there is a school in Paris which was already sending parties to the Louvre in about 1830. But these

are only isolated examples where the initiative came from the teachers and the museum played a passive part. Today, on the other hand, as the idea of the museum as a "centre of culture" gains ground, the museums is beginning to play an active part. It has gradually become the auxiliary of the school with which it often works in close co-operation, putting a part of its resources at the service of the school children. In those museums visited by children it has therefore become necessary to produce new educational services.

These Educational Services as they are generally called, are usually directed by a member of the museum staff who must know thoroughly not only the collections of his museum, but also present day methods of teaching; he can then arrange an educational programme which links up with the school curriculum under the best conditions and according to the resources of the museum. He is nearly always assisted by voluntary helpers or by students paid merely a nominal salary.

Sometimes, and it is to be hoped, increasingly, these educational services have at their disposal a lecture room in the museum, with a projector and teaching material in the form of educational films, film strips, photographs and, less often, a small collection of original specimens from the museum store room: finally the children who want to work in the exhibition galleries can find folding stools, light drawing boards, easels, and even paper and pencils.

The Educational Services vary little, except in detail, from one country to another and their activities can be summarised under the following heads:

1. organisation of educational visits and activities connected with the visits,
2. training of lecturers to guide the educational visits,
3. organisation of educational exhibitions,
4. organisation of exhibitions to be sent outside the museum,
5. publications and lectures.

Few museums in Europe possess an educational service that functions regularly. That is not to say they do not exist or that there are no educational activities: but they are less varied and less systematically organised than in the U.S.A. They are limited in general to guided visits, talks or lectures, sometimes illustrated by films, and didactic exhibitions. The work is done either by

a member of the museum staff, who takes it on almost always over and above his ordinary work, as in the Rijksmuseum in Amsterdam, or else by the whole body of the scientific staff, who share the work between them. At Copenhagen the National Museum places at the disposal of schools that ask, a museum assistant with knowledge of the particular galleries they want to show to the children. Sometimes the museum calls on a teacher of a special subject, (history, natural sciences, etc.), who may be officially attached to the museum to which he devotes all his time, but more normally he is employed as an assistant coming only a few hours a week when he is free from his ordinary teaching. This is a system which is increasing and which ensures closer collaboration between schools and museums.

We might also mention the smaller museums whose total staff consists of a single curator with his time already fully taken up, where, in spite of this, children find a kind welcome and a ready understanding of their needs.

But there are still many museums in Europe where children would derive great benefit but where nothing is done for them. It is therefore up to the teachers to take their children and to know how to arouse their interest in the collections: rarely will they fail to find a warm welcome and useful assistance from museum officials.

2. Different Types of Museums

The practice of taking groups of children to a museum with no definite aim except to wander from room to room, is fortunately being gradually abandoned. They are not now taken unless it is certain that they will find something there to illustrate or complete what they already know. Experience has shown that some types of museums are especially well-adapted for this purpose, for example, museums of ethnography, history, science and technology, whose specimens almost always interest the children and give the teachers excellent material for demonstration.

Nevertheless it is still important that these museums should seem welcoming and should possess cheerful galleries with carefully presented specimens which are easy to see even though shown in glass cases. Every day modern exhibition methods increase the number of museums to which children will enjoy going. Such are, for example, those technical museums which have been established

in accordance with modern teaching principles, where the child has only to press a button to set a complicated piece of machinery in motion. The same may be said of natural history museum where the specimens are no longer arranged only in systematic order but also in groups representing natural habitats and of the history museums where the life of a period is evoked by the grouping of different objects (weapons, costumes, tools, fabrics, etc.), to form a coherent whole. Art Galleries are in a more difficult position and visits need very careful preparation so that the individual appreciation and taste of the children are not lost. Certain connoisseurs' collections and museums where order and clarity are over-ruled by the picturesque should be avoided; they might appear depressing and boring to the children.

Once a museum has been chosen, the children have to be guided so that they derive the most benefit from the visit and feel encouraged to come again on their own. It is towards this double objective that the different systems of educational visits, which have taken shape in most of the European museums, are striving.

3. *Educational Visits*

The educational visit is the method often used because it is the best means of arousing and keeping up the children's interest. Most of them are visits organised by the schools or at their instigation. These visits can be either "guided" or "unguided", or sometimes both methods are combined.

a) *Guided School Visits*

Guided school visits generally take place during school hours : in Norway and Sweden they even form a regular part of the school curriculum and in one particular town the children are taken to the museum ten or twelve times during their years at the primary school. The programme is arranged at the beginning of the year by the museum education service according to what is on view in the museum; it is then sent to the schools with a leaflet introducing each of the topics chosen. This means that the teachers can prepare their children before bringing them to the museum : sometimes they even make them do a piece of work on the subject to be treated at the museum. Then the children are taken to see the collections, and as they have been

prepared they can follow the lecturer's explanations quite easily. Finally they are left to themselves to complete the visit on their own by drawing or making notes on whatever has specially interested them.

In the museums which have a lecture room, these visits are often preceded or followed by a short talk illustrated by lantern slides or films. In this way it is easy to draw the attention of the children to details which they could not see in the specimens in the glass cases, or to show them, for instance the site of an architectural whole from which were taken sculptures seen in the galleries. If the educational service has any original specimens these are put out for the children who can then see at first hand the material and method of making a prehistoric axe, a roman helmet, a mediæval weapon, etc. This direct contact always arouses very great interest in the children: once they have held in their hands a specimen like the more valuable ones in glass cases, they lose the feeling that they are looking at something inaccessible and totally devoid of human significance.

Many countries, however, still leave the organisation of school visits to the schools, thinking that the teachers know the needs of their children better than anyone else. It is left to the teachers to choose the best museum to which to take the children, to arrange the programme each term and to decide whether they or a museum lecturer should guide the children. If a museum lecturer is required it is important, if the visit is to be a success, that he and the teacher should meet beforehand to discuss the subject matter, the method of presentation and the way in which the children can take an active part in the work. Moreover in the opinion of those who practice this method, any teacher who decides to take his class to a museum or an exhibition, should have prepared the children very carefully. He can sometimes get help from courses arranged specially for teachers in certain museums.

If they are prepared in this way museum visits are usually very valuable, and muddles and unnecessary searching for specimens which are difficult to find, are avoided. It is searches such as these which upset the children, distract their attention, break up the groups and cause the confusion which sometimes gives rise to the remark that museums were not made for children. If on the other hand the child is taken straight to the specimen which he has heard discussed or seen on the screen, he enjoys comparing what he has seen and heard with the real thing. He already

knows its history, the place it occupies in the development of civilisation, he tries to make comparisons and, if the visit is not too long — an hour is normally considered long enough — he will leave the museum with a desire to come back. All this applies particularly to historical and scientific museums : in art galleries it is sometimes better to leave to the children the joy of discovery, and it is therefore not until after the visit that the lecturer's comments can be most useful.

However well prepared a visit has been, it is not really successful unless the number of children is kept low. The best results are obtained with groups of not more than twenty of about the same age and intellectual standard. It is then easy to question them, to follow their individual reactions, to arouse in them the desire to do their best, which is not the same thing as competition but a good means of making them exercise to the full their faculties of observation and criticism. Finally, there does not seem to be any advantage in taking very young children to museums which have not been specially designed for them. Experience has shown that it is between the ages of ten and fifteen that children profit the most from visits : if younger than that they probably lack the background necessary to make them really interested in what they see : if older, they are more interested perhaps in going on their own to the museum, which they will not fail to do if they have been given the desire.

In order to encourage children to come back, certain museums in Sweden and Norway distribute to each of them at the end of the course of visits, a free entrance ticket for one child and two companions : and it is not unusual apparently, to see during the next few days, a boy taking his parents round the museum and explaining in his turn what he learnt himself a few days previously. In Holland some museums have instituted a yearly season ticket which allows children to come back as often as they like for a very modest price.

b) Unguided School Visits

Unguided visits usually take place outside school hours : a group of children comes on the instruction of the teacher to collect information for work to be done at school, for instance a decorative painting, a literary or historical essay, scientific research, etc. Sometimes they come with their teacher who keeps in the background, but usually they come on their own. The present day

method of teaching, known as the "active method" which aims to develop initiative and personality in the young, lends itself very well to this type of visit. In France for example, the museum is often used by children making an "enquiry" on a given subject. Care is taken wherever possible to send the children only to those museums which they already know, so that they do not tire themselves wandering in the galleries searching in the cases for things they will never find.

c) Visits partly guided and partly unguided

This approach has recently been tried in several museums and seems to give good results.

The visit is divided into two distinct halves and interest is therefore kept up so that it can last longer than an ordinary visit. It has great advantages for the distant schools who have problems of transport. The first half of the time is spent in a guided visit prepared and carried out in the way we have already described. Sometimes the preparation is completed by a small exhibition of specimens arranged in the lecture room by the lecturer: he uses them to help to demonstrate what he is saying and to ask the children questions.

In the second half of the visit all the initiative is left to the children; they split up into little groups and go out into the galleries; each group has to make an "enquiry" on a detail of the problem all were studying together a few moments earlier. Complete freedom is left to them to choose what examples they like and to carry out the enquiry in their own fashion. During the next few days, drawings or sketches, and notes taken during the lecture and completed individually afterwards are put together and used as a summary for the whole class. If this is particularly successful it forms a short guide and has the honour of being included in an exhibition of the children's work.

The enthusiasm of the children, the attention with which they listen to explanations given them and the care with which they take notes and draw, all go to prove the success of this method.

d) Questionnaires

A good way of making the child think about what he is seeing is to give him questionnaires published by the museum, which he has to fill in during the course of the visit or in the days following it.

These questionnaires vary very much according to whether they are for use in historical museums, museums of science and technology or art museums. Those for historical, scientific and technological museums can be more academic in character: they are a means of checking the knowledge acquired by the children during a visit and making sure that they have listened attentively, understood the explanations which have been given them and looked carefully at the collections or specimens they have had to study. Such for example, are the questionnaires at the Royal Tropical Institute at Amsterdam where questions are asked about the population of the Dutch Indies, native customs, costume, etc. The one fault of these questionnaires, of making too many demands on the child's memory, seems to us to be compensated for by the way in which he is made to learn by looking and to make use of his powers of observation.

Questionnaires at art museums have to be more imaginative in character; they must appeal much more to the child's feelings than to its memory. "Which picture do you like best? Why? Are you more attracted by the colour and composition than by the subject? What does it call up in your mind?" These are some of the questions that are most often asked. They are meant, it is true, not for young children, but for children of 15 - 18 years old who have already had some experience of art and are capable of analysing their reactions. This method is often used in Sweden and in Norway for exhibitions of painting: it has the great advantage of leaving the liberty of choice to the child and of guiding him to aesthetic appreciation without interfering with his taste and personal judgement. Later when some of the questionnaires are read in class interesting discussions may arise.

e) Other School Activities after the Visit

Other activities very often follow and complete the museum visits, such as simple reports and drawings, the making of a model of a machine after visiting the museum of technology, short plays, the collection of botanical and geological specimens for which the natural history museum has given valuable information, etc. This work then forms an exhibition either in the school or in a more important centre, such as the Musée Pédagogique in Paris.

f) Financing of School Visits

Generally speaking only the lecturer's fee is paid by the school; either it is paid in a lump sum at the beginning of the year, which is usual if the visits are part of the school curriculum, or after each lecture according to a fixed scale. Nearly always school groups are allowed into the museum free: some museums extend this privilege, on certain days, to children coming on their own (the Musée du Louvre for example). If an entrance fee is charged, it is usually for a deliberate reason of principle: however small the sum demanded, it represents an effort on the part of the child, especially if it comes out of his pocket money. As a result it is unlikely that he will come to the museum just in an idle moment; he will come there because he really wants to, and there is, therefore, every chance that he will pay attention to what he sees.

g) Training of Lecturers

The success of a guided visit depends largely on the person who guides, whether he be a museum assistant or a class teacher. There has been much discussion on the advantages and disadvantages of both these solutions; on the one hand the assistant who has at his finger tips all museum questions, can give more complete explanations than a non-specialist; on the other hand the teacher understands the capabilities of his children better than the assistant and can adapt his talk to their intellectual level.

Whoever is chosen, it is important that he should be trained, and in certain museums free courses are organised for teachers. The programmes are arranged as school programmes and the lectures, generally held in the exhibition galleries, are given by the scientific staff of the museum. In Denmark, the museum is responsible for organising such courses. In France, where similar courses are held in the larger museums in the Paris region, the education authority and the museum combine to organise the courses.

The training of the museum lecturers is usually left to the assistant in charge of the Education service though sometimes with the help of the curators. The training is mainly concerned with the museum collections, but it does also include the essentials of teaching practice. Sometimes the prospective lecturers take an examination before finally entering upon their duties. It is to be hoped that future children's lecturers will have some knowledge

of different methods of teaching, curricula, and systems of education, etc., and that teachers' courses, such as have existed in France for several years, will be open to them.

4. Permanent and Circulating Exhibitions

Educational exhibitions organised by museums are not meant only for children; however, if they are arranged to teach something and to be comprehensible to a large public, children can usually find something to interest them. Here again the visits must be selective; for it is important to avoid taking the children to so many exhibitions that they lose interest in outings even to exhibitions of exceptional interest; and it is also important to limit the visits to those which do not require too great an intellectual effort, and to realise that a visit to a museum ought to be a relaxation and not just a mere exercise. For this reason, all exhibitions which appeal to their eyes and ears as well as to their spirit of curiosity are particularly suitable for children. A scientific discovery, an important historical fact, the life and work of an artist or a man of learning, will mean more to the children if it is presented not only in pictures and in the written word, but also in films and on gramophone records which will help to create an idea of the background of a famous man. Certainly the travelling exhibition which Poland recently dedicated to Chopin owed a large measure of its success to the gramophone records of his most famous works which it contained. And there is every chance that the adolescent, halting for a moment in the Norsk Folkemuseum at Oslo in front of Ibsen's study and seeing his unassuming writing table and lamp with its green cardboard shade, will not forget the author of the Doll's House and may even want to know better the work of the writer into whose life he has seemed to penetrate. These are examples which should be borne in mind by those thinking of children when they organise an exhibition.

School groups are nearly always given special facilities in exhibitions like these, such as entry at reduced fees or even free at certain times. Moreover special lantern lectures are often arranged to present the exhibition to children and to enable them to go round it later on their own.

In France when especially important exhibitions take place, teachers are informed and invited to bring their children: these

visits are naturally in school hours and are usually preceded by a short talk by the teacher. When there are exhibitions of this sort in Paris the children are brought from the suburbs and even from villages as far as 50 miles away. They are entertained by the Paris schools and lycées and the cost is borne partly by the school itself and partly by a small contribution from each child. It is in this way that exhibitions like those organised by the Palais de la Découverte and the Musée de l'Homme or the Exhibition of Treasures from the Museum of Vienna, have been visited by thousands of school children.

Some educational exhibitions are arranged so that they can travel from town to town; in these cases it is a great advantage if the material used in presenting the exhibition can also serve for packing. An ingenious method which we saw in Sweden consisted in fixing the specimens on light but strong panels. These panels, surrounded with broad strips of wood, are hinged together in pairs. When closed one over the other they form a sort of packing case deep enough for the specimens to be protected with paper, etc. and to run no risk of being broken. Once the cases have arrived they have only to be opened, placed up against the wall and sometimes to have feet attached; then the exhibition is ready, and a room in the town hall, the school dining room, a room in a shop will do to house it. Short explanatory notes are sent with it and sometimes even a lecturer to introduce it to the public.

In Poland where circulating exhibitions are used a great deal for the cultural education of the people, a bus has been specially equipped so that such exhibitions can reach the most remote villages.

There is not, of course, any question of sending first class exhibitions to all the small towns because their size and value alone make that impossible. But it is to be hoped that the practice will spread of sending round small exhibitions, easy to handle and not too difficult to organise. In the case of art exhibitions, they should, whenever possible, include at least one or two originals — a principle almost always respected in Scandinavian countries. However perfect a reproduction of a picture or a cast of a statue, it never equals the real thing: for those who have already had the chance of studying a painting or a sculpture it can evoke the quality of the paint or the suppleness of a model, but it can mean very little to those who have never seen great art at first hand. Naturally, it is not intended to send the greatest works

of art round the countryside, but rather to train the public to take an interest in art through showing them specimens of less value. Many museums have in their store rooms pictures by lesser masters or, for example, statuettes which would help people to understand and feel the beauty of a Rembrandt or a Greek marble better than any reproduction.

5. *Loan Collections for Use outside the Museum*

There are very few museums with collections of this kind in Europe. However the Royal Tropical Institute at Amsterdam already has for the use of schools and cultural associations several collections of specimens about the life and civilisation of other lands. There are lantern slides, maps and diagrams to go with the specimens, as well as a booklet in which the teachers can find the necessary information to present the exhibitions themselves; in addition lectures to give more information are organised at the Royal Tropical Institute for their benefit.

In certain countries central loan schemes have been specially established to make teaching material available to the schools and other teaching organisations. This is the purpose of the "Musée Pédagogique", a state institution founded in Paris in 1879. The collections, originally entirely of educational publications, now include very valuable material of all subjects taught in the classroom. At the present moment nearly 500,000 slides and about 12,000 educational films are available to the public. Slides and films grouped in series according to subjects, and supplemented by an explanatory leaflet, are sent free all over France. For the better distribution of this teaching material, local centres have been established in the chief provincial towns.

Following the same principles, the Musée Sculpsit de Berne circulates diagrams, maps, photographs, models and even biological exhibits. An annual subscription enables schools to make use of the collections.

6. *Publications and Lectures*

In addition to information leaflets, some museums put at the disposal of teachers other useful publications, such as questionnaires for the children, reproductions of works of art and monographs illustrated by examples taken from the museum. At

interesting example is the enterprise at the National Museum of Stockholm : when there are large exhibitions it publishes calendars in the form of small catalogues containing reproductions of the chief works exhibited. School children undertake to sell the calendars and with the money raised the museum offers to the school which sold the most calendars, an original work of art (a print, a painting, a statue, etc.).

In order to draw a larger public and to extend their scope some museums, notably in Denmark and Belgium, send a delegate to the youth camps and to the village schools to organise cultural activities, such as archaeological and geological expeditions, discussions on artistic subjects and lectures to illustrate specimens borrowed from the museum. There is an interesting experiment at the Museum of Fine Arts, Oslo : every so often a young artist is asked to make a print, usually a coloured lithograph, of a given subject, to decorate the schools. In this way young artists make themselves known and at the same time children have the advantage of seeing original work of high quality.

CONCLUSION

These are the chief ways in which the different countries of Europe are making better contacts between museums and young people. It is important to realise however that the success of such enterprises depends less on the means used, than on the people who use them. No matter how bright and alive a museum may be, there is little chance that children will go on their own if no one has revealed its delights to them; and, however well prepared a visit may be, it is likely to be boring for the children unless some one has succeeded in arousing their curiosity first.

Obviously frequent contact between the museum staff and the teachers should be the basis of all activities properly adapted to the needs of children. The task may seem difficult to those who wish to take it on, but it is worth while attempting; for is not to open wide the doors of the museums to young people to enable them to learn the finest pages of the history of the human race ?

MOLLY HARRISON

MUSEUMS AND YOUNG PEOPLE
IN GREAT BRITAIN
AND THE BRITISH COMMONWEALTH

INTRODUCTORY

THIS report is put forward very tentatively and with full knowledge of its inadequacy. It has been thought best not to attempt a survey on a geographical basis, but to summarise briefly the types of service for young people which are provided by museums in the British Commonwealth and to give an indication of the basic educational principles underlying them. The author has had no opportunity of seeing museum services throughout the whole area, but correspondence with a number of Museum Directors in the Commonwealth has established that developments and aims in those countries are along very much the same lines as those within Great Britain.

It is very doubtful whether any good purpose would be served at this very formative stage in museum education work by describing in detail the work of individual museums. Circumstances vary greatly from country to country and from area to area and time is required for museums to work out individually and by trial and error the particular contribution which they can make to the very difficult and distinct problems of the contemporary world. An adequate account of their contribution cannot be given until a later stage, when our present society has become established in its new shape and our museums have found the most appropriate ways of helping in the new education which is needed in the modern world.

PART I

HISTORICAL BACKGROUND

The British Commonwealth possesses museum resources equal in richness and variety to those of any area in the world and annually expends large sums of public money upon them. Few people today would deny that these museum resources should be used for educational purposes but there is as yet little general agreement about whom the museums should educate or which are the most appropriate methods for doing so. During the past two or three generations much thought and experiment have been devoted to the adaptation of museums and their often unpromising material to the needs of children of all ages. The result has been

that in recent years provision for children has found an acknowledged place in much museum work and in some places museums have been brought into very fruitful cooperation with the public educational system.

Attempts to use tangible objects as educational material for young people are no new development. A good teacher, or an understanding parent, has always shown the child things of interest and beauty, encouraged him to handle them when this was reasonable and helped him to follow up his interest in practical ways. There is indeed nothing new in this approach; seeing is believing and feeling and doing are even more so.

The great national museums of Science and Art at South Kensington, established in the middle of the 19th century, were among the first large museums in the world to be deliberately founded with popular education in view. Since 1864 the Victoria and Albert Museum has circulated loan collections of pottery, fabrics, metalwork, woodcarving, drawing and design to recognised schools of art and to museums attached to such schools; in 1880 the system was extended to museums and art galleries not connected with schools and 1908 saw books and lantern slides on art subjects included in a further extension to a wide variety of schools of all types. This development reflected the gradual awakening of an "adult" museum to its responsibilities for the education of young people.

The initiative in providing museum facilities especially for children came not from London, but from the provinces. In 1877 the Horsfall Museum in Manchester, in 1895 the Educational Museum at Haslemere and in 1899 the Educational Museum at Selby were opened as popular institutions. The philanthropic citizens who founded these individual ventures saw the need for enlivening the education of the masses by demonstrations and the handling of material. They wished to encourage an insight into broader artistic and cultural themes than were at that time considered the province of the schools, for there the newly introduced compulsory education had to concentrate almost entirely on instruction in reading, writing and arithmetic.

These pioneers were ahead of their times, and significant and important though their efforts were in terms of their contemporary environment, they had little influence upon the general museum movement and most other institutions continued to restrict themselves to their accepted functions of collecting and preserving

specimens and displaying them more or less effectively to a public which was assumed to have sufficient educational and cultural background and enough mental curiosity for the material to have real meaning for them.

It is significant that none of these early educational museums were for children only. They were termed "educational" and were thought of as serving uninformed people of all ages. They were planned on the assumption that people would wish to learn about their world if they could do so by means of observation, comparison and experiment, rather than by instruction and exhortation. This was a revolutionary assumption to make and even in those cases where the museums became dormant after a spell of activity — as at Selby — their efforts have importance when viewed alongside the rudimentary facilities for popular education at the time.

At Haslemere children were specifically catered for from the foundation of the museum: classes were held for children from local schools and children were welcomed in the museum in their spare time. An examination was held twice a year and prizes were given; many children assisted voluntarily in the collection of natural history specimens and in their display and maintenance in the museum; the drawing of exhibits has always been popular. The educational work of this museum has always depended largely upon enthusiastic voluntary helpers and upon the strong community spirit which they create and keep alive.

In Manchester during the first world war some school buildings were requisitioned as hospitals and some displaced classes worked in the museums and art galleries. So much benefit and enjoyment were derived from the children's contact with the exhibits that organised cooperation between the museums and the schools was introduced after the war. Teachers were selected from their schools and allocated to give courses of lessons in the museums to the schools. These teachers continued to be paid by the Education Committee of the City Corporation and were under the direction of the Education Officer, but they spent all their time in the various museums of the city.

The Horsfall Museum was a pioneer in two other types of museum work with children: first, a loan scheme for schools of all types, started soon after the establishment of the museum, operated for many years; secondly, when the museum was passing through a bad period in 1912 its appeal for children was enlivened

by the establishment of a Children's Theatre for local young people in their leisure time.

The theatre was open on one evening a week. All plays were chosen by the children and produced largely by their own efforts. The theatre was in a separate room adjacent to the museum building, but the exhibits played their part in its endeavours, for suitable objects were often extracted from the cases and adapted to serve as stage props. There was a wholly "club" atmosphere, entirely different from that normally associated at that time with a museum, and this probably at times became exaggerated and assumed too great a place in the affairs of the museum. Such a complete swing over to informality is understandable when one remembers the unnatural and largely unwelcome emphasis upon formal instruction and rigid discipline in the elementary schools of that period, more particularly in a poor district of a large city.

However, this individual excursion away from formal instruction for young people in a museum was unique and seems to have had little, if any, affect upon the main progress of museum work. In 1912 a Children's Museum was arranged as part of a Child Welfare Exhibition in London, but this was a temporary arrangement and, again, not in the main line of development in museum work.

Another notable piece of pioneering work with children took place in the Victoria and Albert Museum during the first world war. A voluntary worker gathered round her the children whom she found wandering about the galleries during the school holidays and arranged specific activities for them. With very limited space and virtually no equipment she arranged "exercises" (as they were then termed) in drawing, weaving, embroidery, pottery etc. All these were based upon exhibits in the museum and each child's work was linked with the specimens by frequent demonstration and comparison. A room was set aside as a studio in which the children could do their "exercises" without interfering with the adult visitor to the museum. Unfortunately these facilities did not outlast the war.

During the period immediately following 1919 many public museums were encouraging the visits of children by reducing or abolishing entrance fees for child visitors and by approving visits of organised parties, and a growing number of people came to regard education, at all its levels, as the primary function of museums. Some Education Authorities appointed a special demonstrator to give lessons to school parties in the museum and in many cases

there was close and friendly cooperation between museum authorities and education departments. Special demonstration rooms were set aside in one or two museums; in other centres, although no specialised teachers were permanently appointed to the museum staff, teachers in the schools were given opportunities beforehand of seeing the material they were subsequently to discuss with their classes.

Circumstances and opportunities varied enormously from place to place but by the mid nineteen-thirties it was not at all uncommon to find museums in many parts of the British Commonwealth providing lively instruction of a good standard for the young people who were brought there by their teachers. During the past 15 years, however, educational theory has developed very considerably and the provisions made in museums before that period are now seen to be inadequate and in many ways contributing less than their best to the education of our children. A new conception of education is now accepted, which acknowledges the great importance of child activity and of individual study, and stresses the need for providing suitable opportunities for these whenever possible.

Doubt is now cast upon the value for many children of the set lecture, however well it may be presented. It is realised more and more that all children should be treated individually, that they think and understand at very different rates and that many who do not easily appreciate words, either written or spoken, will respond keenly when faced with a practical situation and will develop sensitivity and awareness through their personal activity.

These ideas are gradually becoming current in schools of all types in the British Commonwealth, but there is as yet little realisation by museum specialists of their importance and little sympathy towards the introduction of activity methods into museums. It is understandable that this should be so in institutions which have in the past regarded their function as mainly that of the preservation of exhibits; yet it is along such lines that developments are to be anticipated if museums are to make a live contribution to present day education. The following sections will therefore record the development and consolidation of earlier techniques of museum education and will indicate also a few newer methods and the principles upon which these are based.

PART II

THE PRESENT POSITION

I. TYPES OF MUSEUM SERVICES FOR CHILDREN

The following are the services most frequently provided for young people in museums in the British Commonwealth:—

1. Children may be admitted to an adult museum as individual visitors and, by arrangement, in organised school parties.

2. One or more rooms may be set aside to serve as lecture rooms or workshops for children. These rooms are often equipped with a film projector and radio; they are not necessarily used for purposes of exhibition, though specimens are often brought there for demonstration.

3. Material of special interest to children may be displayed, either temporarily or permanently, in a special children's gallery to which both children and adults have free access.

4. In a large municipal museum in one city a separate Department of Education has been operating for the past six years. The department ranks equally with the older departments of the museum and is staffed by teachers, has separate offices and lecture accommodation on the premises and can also use the museum galleries for classes at any time. This department also produces visual education material for use in municipal schools and has staff specially engaged upon this work.

5. In a number of smaller museums a Schools Organiser is appointed either by the museum or by the education department. In some cases one such teacher will have his or her time divided between a number of museums in an area. Some authorities have appointed School Liaison Officers who work to coordinate the needs of the schools with the museum facilities available. In a few cases this coordination is carried out by a committee of teachers, museum officials and education administrators.

6. In a few municipal museums, controlled by the education department of a city, a number of teachers are employed to work both with children in school parties and with those visiting in their leisure time.

II. METHODS OF USING THE SERVICES

Children have contact with museum material in four main ways:—

1. By class visits to the museum
2. By individual or group visits in leisure time
3. By the loan of museum material to the schools
4. By a museum in the school

1. *Class visits*

There are few museums in the British Commonwealth which do not make special arrangements for visits by school parties. But merely to allow school parties free admission to a museum is rarely considered to be enough; some form of direct help is necessary if a visit is to have its fullest value. The unguided viewing of specimens is found to leave a confused and exhausting impression upon a child, for even a small museum has too many items on view for the uninitiated visitor to grasp much of its meaning without help.

There is great diversity in the type of help given by museums to school parties:—

a) Oral instruction

(i) Oral instruction is given by an official of the museum. This may or may not have been discussed beforehand with the class teacher and much of the potential value of the talk will be lost if there has not been some such cooperation. An introductory talk is given in some cases and the group is then free to wander about at will, observing those things which particularly interest them, and they may have a summing-up talk at the end. The relative success of this method is found to depend upon many factors: the extent to which the museum specialist has a good approach to young people, the extent to which the class teacher has prepared the children's minds and feelings for the visit, and the type and standard of child.

A "general tour" of a museum with a class of children is now much less frequently attempted than formerly and there is fairly general recognition of the fact that some concentration of interest upon specific exhibits or particular themes is necessary.

(ii) The instruction is given to the class by the class teacher. This method has the advantage that the teacher knows the children and can deal with those exhibits which are of particular interest to them; but there is often found to be less stimulation in listening to a familiar voice and it is rarely that the teacher has the requisite knowledge of the exhibits. In certain instances this difficulty is avoided by courses of instruction for teachers beforehand or by the distribution to them of leaflets or sets of notes about the exhibits.

(iii) The instruction is given by teachers appointed to deal with the school parties visiting the museum. This method is increasingly in use; the advantages are that these teachers are familiar with the museum material while at the same time they are skilled in handling children.

b) Instruction giving place to active methods

The methods of dealing with museum material so far mentioned tend to be mainly instructional in character; that is, the children visit the museum for a *talk* about the exhibits and formal instruction is assumed to be the most appropriate means by which they learn. But more museums are now bringing their methods into line with contemporary educational theory and practice and are experimenting with means by which the child can participate in the visit to a greater extent than is possible when he is merely listening.

Not all museum material lends itself readily to any form of direct participation by children, but this is obviously important if they are to feel a personal interest in the specimens and to appreciate and understand them to the fullest extent. An object in a locked glass case is very remote and unreal and if museum lessons are to give life and reality to school studies the exhibits must be felt to be real things and the children must be able to handle them or in other ways feel a closeness to them. Judging the shape and texture of a specimen, working a model with one's own hands, setting out a series of exhibits in a coherent order, leads to a more real appreciation than merely attempting to grasp facts intellectually and theoretically. For children there is a vast difference between some form of active participation and mere looking on while someone else explains.

c) Types of participation by children

Participation in activities directly connected with the exhibits has been worked out along many different lines in different

museums, but in general it can be said that a great deal still needs to be done in this matter. There are, of course, many problems involved in attempting to bring young people into direct contact with exhibits and each museum has to circumvent its particular difficulties in the most appropriate ways. Here reference can only be made to the main ways in which children participate directly in activities based upon museum exhibits:—

(i) Handling exhibits during or after a talk. In many cases this is permitted, but where original material cannot be handled owing to its rarity or fragility specimens from the reserve collections are, in many museums, put at the disposal of school parties.

(ii) In a number of museums certain exhibits are arranged so that they can be set in motion by pushing a button and in one or two large national museums these exhibits are arranged in a special Children's Room. This push-button technique is undoubtedly very attractive to children and is a vivid way of conveying a simple process or movement. If it is overdone, however, its result is likely to be the reverse of educational, for if the child is confronted with a succession of models which he can operate he will tend to rush from one to another in his excitement and will be unlikely to gain any real or lasting impression from his visit. The act of pressing a button is so easy that it demands no real effort or thought; moreover, with the less academic type of child it will seldom, if ever, lead on to the reading of a label or the serious study of the mechanism. Excellent though working models can be there are serious dangers in their random use.

(iii) Facilities for drawing are provided in a number of museums. Either drawing is "permitted", but no special provision is made for it, or — more usefully — school parties are given pencils, paper, drawing boards and stools. Drawing is surely one of the most appropriate means of recording a visual experience such as is offered by a museum visit, and observation is found to be heightened and curiosity stimulated by such opportunity. Too great stress should not, of course, be laid upon accuracy of representation, or interest and spontaneity are likely to be lost and, in art galleries, copying the paintings is not on the whole to be encouraged.

(iv) Dramatisation of historical or geographical events with the aid of exhibits is a vivid means of bringing museum material to life for school parties. Costumes, armour, small items of domestic equipment etc. are temporarily removed from their cases or — more frequently — can be borrowed from the reserve collections.

v) The four techniques described above are generally used in conjunction with or following upon a good deal of verbal instruction and when well used they serve as a very important leaven to the weight of this. Certain museums have, however, gone a stage further in their approach to school visits and have drawn up a variety of textual and pictorial material of a simple kind upon which and with which the children can assemble the results of their explorations around the museum.

In some cases this material takes the form of straightforward "Questions to Answer", in others it will involve a variety of things to do : drawings or models to make, paragraphs to complete, themes to work out, material to correlate, assemble or compare. Each institution in which such methods are used will have a different emphasis, but perhaps one general word of appraisal may be relevant. On the whole such material is of greater educational value the further it is removed from the realm of the "quiz". The direct, factual question demanding the snap answer, but involving little analysis or further thought and leaving no room for shades of opinion or emphasis is not on the whole a worthy method of approach to museum material, and in most museums in the British Commonwealth its use would probably be regarded with a certain suspicion. Perhaps the most important contribution which museums can make to contemporary education is in the realm of sensitivity, of visual discrimination and appreciation and the aim is felt to be a gradual growth of understanding and awareness rather than the mere acquisition of facts such as good reference volumes can provide.

d) The value of class visits

The maximum value is found to accrue where the following four points are kept in mind:—

(i) Close cooperation between school staff and museum staff is essential if visits are to be really successful. Good preparation and good follow-up are the most essential elements in any visit and these are more likely to be appropriate if all the adults concerned have cooperated in planning the visit.

(ii) A few museums make a point of staging exhibitions of any interesting work done by visiting schools, either during their visit or as follow-up work in the classroom. This is encouraging and stimulating to school and museum alike, is invaluable in building

up the children's self-confidence and can be very useful in spreading sound ideas.

(iii) Few museums can cater for large numbers in a group and even where they have adequate seating accommodation it is generally found to be far better for groups to be limited so that all can see the exhibits which are discussed and can cooperate without undue discomfort. Even more important is the fact that where the group is unduly large, little more than instruction can be attempted, the personal touch is lost and the visit therefore loses most of its value. On the whole it seems likely that a visit of too large a group is almost valueless and it would be better if no visit were paid at all.

(iv) The frequency of visits is important and many museums arrange for classes to pay a series of visits: in some cases there may be six visits in a series, in others a class will attend the museum once a week throughout the school term or year. In general it is thought better to provide the best possible service for a smaller number of children than to try to cover a greater number in a superficial manner.

2. Leisure time visits by children

This type of visit is at present less well developed in the British Commonwealth than organised visits by school parties. Most museums welcome children visiting on their own, of course, but comparatively few provide special facilities for them. In a number of cases Saturday morning classes in art, nature study, puppetry, drama etc. are held in a "club" manner and prove popular with the young people; special film programmes for children are sometimes shown; special children's lectures are well patronised in some areas; selected exhibitions for children, either in a separate "children's gallery" or in a section of the normal adult museum, are another feature in some museums. Children's centres in a few large museums are a new development and this type of facility seems likely to spread. Here children help in the display of a selection of exhibits and undertake all manner of practical activities based upon the exhibits. Some museum children's centres organise Field Study outings to collect and study natural history specimens and to explore things of historical or geographical interest in the neighbourhood.

Museum activities in the form of games, puzzles and the

compilation of booklets and charts all based upon the exhibits are a useful and attractive means of helping the young people to look purposefully among the exhibits and to make both visual and mental connections between those which are related to one another.

The extent to which such informal methods are used as a means of interesting young visitors varies greatly from place to place. In general, the success of such work seems to depend upon a friendly and informal atmosphere, upon the provision of a varied and changing series of practical things to do and upon the skill with which the staff is able to combine "playway" methods with an earnest concern for the true meaning and standard of the museum material. For such activities to be appropriate and of value, it is found that they always need to be directly connected with the museum exhibits and must be a means of directing attention to them. They should not be a distraction from the exhibits and there should be no attempt to reduce the adult material to a merely childish level; the aim should be to ensure that when he approaches the museum exhibits the child is mentally alert, emotionally receptive and able to grasp whatever is within his natural reach.

There is little enthusiasm in Great Britain for the development of museums intended exclusively or even mainly for children. It is felt that there is a value in the child's contact with adults who are also out to learn, and that he can thereby be helped to see the material in truer perspective. In museums planned exclusively for children there is always a danger that standards both of display and of interpretation may be unnecessarily low.

A small number of museums in Great Britain have developed a similar approach both for school parties and for children visiting in their leisure time, and where this integration of the two types of visit can be achieved it is considered important and likely to help in bridging the unfortunate gap which, in contemporary society, so often exists between people's attitude to their work and their leisure.

In one or two cases museums organise children's activities on a competitive basis, but in general this is found to be unnecessary and is considered harmful. Young people have remarkable powers of concentration when they are really interested and are normally willing to do a job for its own sake and not for any extraneous ends. In a world which is increasingly competitive and where voluntary effort is on the decline it is important to encourage children in cooperative ventures rather than to foster the

competitive element in their natures. For the same reasons museums in Great Britain do not on the whole give prizes for good work or for regular attendance; it is felt that unless children come for the sake of whatever it is a museum can offer them on the non-material plane, their coming has little worth.

3. *Museum Loan Schemes*

In areas where good museums are few and children have little opportunity of benefiting from museum visits, a loan service to schools can be extremely valuable and many such are in operation and others are being planned. Such loan services are provided either by an individual museum or art gallery — when it is autonomous and separately organised — or more often by a Local Education Authority, in which case it may be developed as a separate unit and not be based on a museum proper at all. "Museum Service" in such a case then signifies the loan of material of museum type and standard. Items of souvenir type and interest would not generally be considered worthy of inclusion.

The normal public museum caters for a wide range of age groups and must exhibit objects of general interest. Its contribution is general, whereas that of a Museum Loan Service is limited in that it provides for specialised groups of people according to age and type. The material is lent to schools for a period and the children thus have greater opportunity for its examination than if they visit a museum once only. Many of the objects loaned are replicas but these are not regarded as necessarily being inferior substitutes for the real thing: in many quarters it is considered of greater value to introduce Roman pottery, for example, to a child by showing him the replica of a whole pot than it is by confusing him with a series of genuine fragments.

Typical loan services in Great Britain distribute to schools and youth clubs the following types of material: objects, real or in reproduction; models; charts; diagrams; photographs; films; filmstrips and gramophone records. This material deals with most of the subjects on the school curriculum and with many others which cannot strictly be described as school topics. The articles are presented either as single specimens for examination and — where possible — handling, or several specimens are presented as a unit arranged for comparison or to illustrate a developmental process. The loan of borrowed specimens is not general, as it is

sometimes necessary to damage or detract from the intrinsic value of an item in order to display it properly.

Staffing conditions vary enormously between different areas and types of scheme, but one particularly successful Loan Service in Great Britain has an Organiser, an Assistant Organiser, an Administrative and a Technical Assistant, in addition to clerical staff, carpenters, vanmen etc. Another large provincial museum has recently inaugurated a scheme whereby a teacher demonstrates museum specimens in secondary schools throughout a widely scattered rural area.

Material assembled for loan to schools is judged by these qualities among others : suitability of medium to topic; clarity of presentation; attractive appearance; simplicity of exposition; logical development of a theme and absence of irrelevant detail. In addition there are certain principles which are considered important by those providing or using loan material :

- a. The material borrowed must fit into a previously planned lesson or series of lessons and should never be used as a core round which to build a lesson.
- b. The teacher must always decide on the type of exhibit borrowed.
- c. The children should never copy the material provided, though it is valuable for them to be encouraged to supplement this material by making their own models, drawings, charts etc.
- d. While notes are sometimes sent with the loans they are not intended as a plan for teaching, but as a guide to give the teacher an outline of the material.
- e. The value of handling whenever possible cannot be over stressed.

Loan services organised by Local Education Authorities lend material primarily to schools but they also provide for youth organisations, agricultural and other institutes, colleges of all types, Army Education Corps, teachers in training etc.

The spirit which now characterises the more progressive schools in Great Britain is favourable to methods of teaching which involve the use of practical equipment analogous to the contents of a modern museum collection. The influence of Pestalozzi and Froebel is growing among educationalists and their principles are seen to affect even the planning and organisation of loan material for young people.

4. *Museums in Schools*

Many of the larger Grammar Schools throughout the area which have a traditional connection with the Universities have tended to make for themselves collections similar in principle to those used at the Universities. These became general School Museums, supplemented by departmental collections of specimens and models. These school museums range from small neglected collections stored away in glass cases in corridors, to museum collections housed in separate buildings of large Public Schools. Some of the latter are perhaps too good to be preserved only for the use of the school and their resources should be known and used by a wider circle of people.

The departmental collections in schools of all types are not usually thought of as "museums", but their function is indeed that of a museum in the wider sense in which the term is coming to be used. The present increasing tendency towards greater freedom and activity in all forms of education in this country requires the use of more equipment and apparatus by children and more and more schools are making, acquiring and displaying this type of material. Many schools situated far from a city do useful work in combining the running of a small school museum with material borrowed periodically from a public collection; in this way children are encouraged in the use and arrangement of specimens and stimulated to visit larger museums when they can.

III. TECHNICAL AIDS IN MUSEUMS

During recent years there has been a great increase in the use of technical aids in museum teaching. Many museums have one or more of the normal "aids": film or filmstrip projector, radio, gramophone, lantern, epidiascope. These may be used as an introduction to the main material of a school visit or as a summary in conclusion; in particular circumstances a visit may be made solely in order to see a film programme or to hear a radio programme. Film programmes for leisure time children are a feature in some museums.

Accommodation for the use of these technical aids is equally varied: ranging from a well-equipped classroom or lecture hall into which selected exhibits may be brought for viewing and handling before seeing a film, to the temporary installation of a

screen and a projector in one corner of a small gallery. The micro-projector is one of the newest and most interesting technical devices used in museums and can do a great deal to add significance and understanding in a natural history museum.

There is a widespread feeling that none of these technical aids, valuable though they can be, should be used too extensively. The main value of a museum visit comes from contact with real, unique or precious objects and there is a danger that pictorial material may sometimes be regarded as a substitute for the real thing; or that films which in themselves may be well-produced may come to be thought of merely as a means of entertainment in a museum.

IV. SPECIAL FACILITIES FOR HANDICAPPED CHILDREN

Museum collections are of particular value in the training of physically handicapped children, whose general sensitivity is usually heightened as a result of their handicap. In many museums blind children are encouraged to handle specimens whenever possible, the deaf are granted special facilities, and in those places where practical and active methods are in use with normal children it is found that those of low mental calibre can derive particular benefit from their use.

Series of illustrated talks to patients in the poliomyelitis wards of a local hospital have been given successfully by the staff of one museum education department; in another instance the curator of a museum was asked to give a series of talks to girls and women in a London prison. Such extensions of museum education work are growing in the British Commonwealth and indicate some of the varied ways in which museums can serve the social and educational needs of their areas.

V. MUSEUM FUNCTIONS CARRIED OUT BY OTHER BODIES

Any review, however brief, of museum services to schools in the British Isles would be incomplete without mentioning the work of a number of other organisations whose functions overlap with those of museums proper.

Our museums are not on the whole endowed with adequate funds for the display of special temporary exhibitions, neither are they equipped with sufficient staff to select and arrange such

frequently changing material as the public, both young and old, would like to see. Their prime responsibility is usually felt to be to their permanent collection. During the past decade a number of other organisations have realised the widespread need today for the presentation of ideas and ideals in visual form if they are to be understood and appreciated by a public which is in other ways so largely fed upon pictorial matter and for whom serious reading has little attraction. The following are among the more prominent organisations which provide exhibitions on themes which can rightly be considered within the sphere of museum education :—

1) *The Arts Council and the Council of Industrial Design.* These are public bodies, supported by grants from the Treasury, but enjoying a large measure of autonomy in their policy and methods. The Arts Council is responsible, inter alia, for the assembly and circulation of art exhibitions throughout the British Isles and for the stimulation of Art Centres in smaller towns and rural areas not served by an Art Gallery. The Council of Industrial Design has a flourishing Education Department and offers to schools, colleges and youth clubs a wide variety of visual material on all aspects of industrial design. This includes wall charts, booklets, portable exhibition boxes, design folios, photographs and models for the practical demonstration of problems of domestic design. They also lend films, filmstrips and lantern slides.

These services are available to museums as well as to schools and colleges of all types. To museums, the education department of the Council will lend exhibition stands for the display of any material bearing upon industrial design, thus helping to overcome one of the practical problems in displaying temporary material on contemporary themes.

2) *The National Association of Girls Clubs and Mixed Clubs,* a large voluntary organisation which fosters club activities for young people after they leave school, has also a scheme for the distribution of material which can well be termed "museum exhibits". They lend to their clubs, upon payment of transport charges only, a variety of specimens, many of which are grouped according to countries of origin. These include booklets and pictures, maps and charts, samples of products, examples of local craftsmanship, books of recipes, a gramophone record or two of local tunes, a description of a national dance, etc. They are intended to be the basis of practical activities of the "exploring"

type and help to encourage an interest in various aspects of life in different parts of the world. This service caters for young people who are mainly not of a type likely to be attracted to normal museum material.

3) A number of Education Authorities in the British Isles have, during recent years, appointed a *County Art Organiser* and a *County Craft Organiser*. These are in no way connected with the Ministry of Education Inspectors in the various subjects. In some counties the Organisers are responsible for the purchase and subsequent loan to schools of original works of art or craftsmanship and in this way children in schools far removed from an art gallery can become familiar with first-rate material even where there is no loan service from a museum or art gallery operating in their area.

VI. LECTURES FOR TEACHERS

Many museums have for a number of years arranged courses of lectures for teachers on the theme of the collections and such information is of obvious benefit to the work of the schools. In those museums in which practical methods are used lectures have regularly been given in recent years to students in training and to other groups of interested adults; these lectures have dealt, not with the museum material, but with the methods developed for the children's use and their possible application to other spheres. Courses in more technical visual methods are also arranged in a number of museums.

VII. FINANCE

There is no standard manner in which museum facilities for children are financed. In those museums which are controlled by the Education Departments of Local Authorities there is no problem of allocation of funds since all the work of the museum is considered to be educational; where the museum is controlled by a separate department some arrangement is usually made whereby funds are made available from the education grant. In the case of the few private museums which undertake juvenile work it is usually found that the Local Education Authority is able to make a grant towards the cost of running a schools service. A decreasing number of museums in the British Commonwealth make any charge for admission, either to children or to adults.

CONCLUSION

Most museums in the British Commonwealth are becoming increasingly aware of their responsibilities to their younger visitors and much thought and experiment are being devoted to the problems involved. Much remains to be done : there is widespread need to consider education in its broader meaning rather than in relation only to instruction; there are opportunities for the production of publications of a new type designed to encourage children's active participation; there is need to consider the opportunities of museums in the sphere of sensory training and of emotional development; and, in relation to content, consideration needs to be given to making museum material more relevant to the daily lives of young people by including more contemporary material. All these aspects are very much in the minds of those who are working in this sphere, as are also the dangers of a too rapid growth, in particular the danger of over-organisation and of rigid standardisation.

Children themselves probably differ comparatively little from one part of the world to another, but the facilities for living and learning provided for them, the attitude of adults, the degree of freedom permitted, the ideas of what they should learn, no less than the methods which are considered to be appropriate — all these factors differ enormously from one society to another, even between nations professing a similar approach to contemporary social problems. Education is not an exportable product, for it depends largely for its effectiveness upon people and upon circumstances; and museum education is no less individual and distinct than any other.

A large museum, with a considerable department of education, adequate funds, well equipped rooms and a team of teachers of varied ability, cannot be compared in any particular with a small institution having a restricted budget, no space in which to carry out activities and having to rely largely upon voluntary helpers for any other than the normal routine work. A museum situated in a poor district of a large city cannot and should not function in the same way as another where the local clientèle is more favoured and where therefore a higher proportion of the young people are likely to have greater powers of concentration, of analytical thought and of persistence. Each director, curator or teacher in a museum has a different responsibility, each group

of exhibits demands a different emphasis and each locality has different needs and offers distinct opportunities. It is essential for anyone considering the development of museum work with and for young people to consider these imponderables first and only then to look into the details of what other people have done in *their* particular circumstances.

There is probably widespread agreement in all countries that young people can find value and help in museum specimens. Interest in visual, tangible, "real" objects is general among all ages, all types of people and all races; the contemporary problem is how the material shall be presented and used so that the non-specialist can best respond to it and appreciate its significance. In the British Commonwealth realisation is growing that a new approach is required in education; that methods of instruction which were appropriate for centuries to the cultivated and interested few are perhaps not appropriate to the majority today. The problem of children in museums is only one facet of the wider problem of popular education everywhere.

CHARLES RUSSELL

CHILDREN IN THE MUSEUMS
OF THE AMERICAS

I

TYPES OF MUSEUMS DEALING WITH CHILDREN

IN the Americas the museums that work with children may be conveniently divided into three groups. First are those, about thirty-five, that have been established, staffed, and maintained chiefly for children. In the United States these are called "Children's Museums", the word "children" connoting indiscriminately young people of all ages through adolescence. A second type of museum consists of those, about thirty in number, where a separate department or museum area is maintained and staffed mainly for young people. In many cases, but not always, this type of museum is called a "Junior" museum. A third grouping of museums, numbering between one hundred and seventy-five and two hundred, consists of those that are established and maintained for general museum purposes of collection, research and exhibition, but which pay special attention to the needs of children and maintain a department of special service for them. Almost all of the general museums of the United States and Canada, a few in Mexico, and a few in South America are found in this category.

II

LOCATION AND PHYSICAL CHARACTERISTICS

With a few notable exceptions children's museums have been established in centers of urban population. Of the exceptions two have been mobile museums serving rural areas, and two have been a part of consolidated schools (1). Several of the children's museums are housed in school buildings which in whole or in part are no longer used for school purposes. The remaining museums are housed in buildings that were formerly large and elaborate residences. The two rural mobile museums have been a success from the standpoint of their service, but neither of them, by reason of lack of financial support is at present operating. One of the best of the children's museums in the United States

(1) In many rural areas of sparse population in the United States and Canada the educational facilities of lower and upper common schools have been brought together in some more or less central geographical situation of an area and the pupils are transported to and from their homes by motor cars.

is housed in a large and well equipped former school building which was abandoned for school purposes simply because larger and more modern plants were erected nearby. The former residences where the remaining museums are housed are solidly built and fairly economical to maintain, except in the matter of heating. The rooms, however, are small for public purposes, and are even smaller when permanent cases or dioramas line the walls. Few of the museums are well lit, but also, few of them are in use except in daylight hours and lighting is therefore not too important. In almost all of the museums space is set aside for group work, for small projection rooms, for motion picture showings or lectures, and there are many provisions for dark rooms for photography, kilns for ceramics, and the like. In the museums where artistic expression is emphasized there are, of course, provisions for studios and similar work rooms.

Not many museums have adequate provision for protection against fire, and only a few are equipped with metal fire escapes or automatic sprinkler systems. Most of the museums use their cellar and attic spaces for storage and for storage vaults, but in none of them is the storage space either convenient or adequate. As a rule there is a minimum of office space, and even this is frequently established in a hallway or entrance where an office worker can be useful both for such work and for supervision or as an attendant.

Among the children's museums there is one that is unique, an urban museum in a trailer coach. This museum stores its excess material, establishes it periodically in the trailer coach, which is adapted to it and for which the coach is adapted, and the coach is moved from location to location as the need may arise.

Insofar as the junior and general museums are concerned their characteristics are in the main similar. Like all other museums these are usually classified by content as art, science, natural science, science and industry, history, anthropology and the like. They are universally located in the larger centers of population, but are distributed, in North America, throughout the land.

III

ORGANIZATION, SPONSORSHIP, AND PERSONNEL

There are in general three forms of organization among the museums that work with children. One form is that of a private

and privately supported institution; a second form is that of a public and tax-supported institution; and a third form is an institution that partakes of both forms of sponsorship and support.

In the privately supported museums there is as a rule a lay board of trustees that makes itself responsible for the policies under which the museum operates. It selects the director of the museum, approves the selection and appointment of all other workers, raises the funds that are used for its support, allocates the budget, and in many cases gives active voluntary help in carrying out the programs with the children. In the museums that have both public and private support there is usually a similar lay board of trustees, but as a part of this board there are representatives of the public body through which the public funds are derived. Some of these museums are maintained by the States, or by State universities, but most of them are sponsored by cities and are connected either with the public schools, as school museums to which children are admitted as individuals in out-of-school hours, or as parts of park, welfare, or recreation divisions of the city governments. Of the museums supported entirely from private funds, some of the art museums are sponsored by local art institutes. One of the children's museums is sponsored by a graduate group of a college sorority. Many of the museums that work with children do so under active sponsorship and support of the Junior Leagues of America (2), and the American Association of University Women (3).

The methods of securing the financial support that all these museums require is as varied, almost, as the museums themselves. Membership in the museum itself is an almost universal form of money raising. This is generally an adult form of contribution, but in some museums there is a membership fee for children, rarely for participation in the program of the museum itself but usually for some specific part of that program. In art museums this fee helps to defray the cost of the materials used. As it does not directly concern our subject, we need only mention in

(2) The Junior Leagues of America consists of nation-wide associations of young women, most of them moderately well-to-do and many of them with growing families, which interest themselves in local community problems and enlist their memberships actively in their solution. Children's museums have been a major interest.

(3) The American Association of University Women has branches of college and university graduates throughout most of America. The establishment and support of children's museums has been one of its major activities for many years.

passing the numerous other sources from which Museums derive their funds, such as through Community Chests (4), endowment funds from gifts and legacies, the rental of objects, fees charged for travelling exhibits, etc.

A major source in some museums is the sponsorship of theatrical productions, intended primarily for children, or of lecture or motion picture series, either for adults or children, with the proceeds used for carrying on the work with children. In one instance a group of women dedicates its entire time and talent for several weeks before the Christmas season to the making of wreaths and holiday decorations, an activity that returns to that museum several thousands of dollars for operations.

Several children's museums are utilizing their space and facilities during morning hours, when work with the schools does not prevent, for the operation of nursery schools (children from two to six years of age) at a fee that enables the museums to add substantially to their incomes.

Museums that exist apart from other educational institutions and depend entirely upon taxation for support tend to become devoted largely to exhibition and research, although a few such museums carry on good work with school classes and several of them maintain splendid circulating collections. There are a number of museums, however, that are maintained as part of a park, recreational or welfare system, or as part of the public schools or university, whose service is preeminent and almost exclusively devoted to the interests of children.

The professional personnel of the museums that work with children is generally recruited from among those who first had an interest in the materials of the museum and later became its advocates with children. The leaders of children in the science, art, and anthropology museums are those whose first training was in those fields. There seems to be little common background among the directors or staffs of children's museums. Some have

(4) In the United States and Canada it is common practice for the various organizations of a community that depend upon the charitable contributions of the populace, to pool their interests and needs and to participate in a campaign once a year for the necessary funds, collected either as cash or pledges. The Red Cross, which has many outlets other than disaster relief, the Boy Scouts, the Girl Scouts, the Campfire Girls, various health and welfare organizations, such as the local hospitals and so on, are frequently combined in a Community Chest Campaign for funds, in which, on occasion, some museums participate.

been teachers in public or private schools, some have been specialists in one or another field represented within the museum, some began their association as volunteer leaders from the lay boards sponsoring the museum, transferring to the professional staff when a need arose, and some seem merely to have been available when a vacancy had to be filled. There have been only a few attempts in the United States, and none elsewhere in the Americas, to set up training schools or other opportunities for training of museum docents, leaders, workers, and the like. Two of these have been general apprentice programs in connection with museums, and there are a few instances of university courses, primarily for teachers, dealing with technics of museum instruction. In technics for exhibition and preparation as well as curatorial responsibility the chief training programs have been of the apprentice type, and of professional training on a college or university level there has been none.

Many of the museums, particularly the children's museums, have a small professional staff and a large volunteer group. These volunteers, people of talent, energy, and with a sense of the need for their service, form a most important part of the teaching staff of these museums. For the most part they are energetic workers, humble in the face of both their responsibility and their ignorance, and anxious for any form of guidance that will help them to help children. In many museums they carry out the most routine jobs of clerical work, of attendance upon registration desks, of cleaning and refurbishing exhibits, with cheerfulness and alacrity, relieving the professional staff for duties no less urgent but more rewarding. Without such willing workers many museums would find it impossible to continue their services.

IV

CONTENTS OF MUSEUMS FOR CHILDREN

There is great variation among museums for children in type and amount of content. In general the children's museums have some materials from a number of different subject fields, with most of their content centering about phases of natural history and ethnology. In a number of the larger museums the collections are separated by rooms or galleries into various categories, such as history, natural history, art, science, anthropology and the like.

The smaller museums frequently have some materials from each of these fields, but often only a small amount in any. These collections come from varying sources. Most of them are procured through the indefatigable efforts of the staffs of the museums and the lay people sponsoring the work. Accessions are usually by gift, but on occasion by purchase, and in many instances have been built up by the efforts of the children themselves who have collected, studied, classified and labeled extensive collections of minerals, shells, insects, and the like. Industrial exhibits, such as of cotton, lumber products, coal-tar by-products, and ores and metals, are often supplied by local or national dealers or manufacturers. Much material in ethnology is supplied to these museums by donors who have collected in their travels such items as native crafts, dolls dressed in native costume, weapons, utensils, and clothing. Many museums added materially to portions of their collections by gifts from returning servicemen during the past two wars. During the past decade, and especially since the end of the last war, many of the larger museums have been rebuilding and refurbishing their exhibitions. As a result much fine specimen material has been discarded to provide for new, and the old materials, such as mounted birds, and animals, insects, scale models, small habitat groups or group studies, excess shells, minerals and so on, have been redistributed, mainly through the efforts of a national foundation, to the smaller and needier museums. Only a few of the children's museums have collections that are comparable in either quality or quantity to those of the adult museums, a fact that can only be deplored.

Most of the children's museums maintain small collections of live animals, such as snakes, rabbits, fish, mice, skunks, raccoons, hamsters and squirrels. A few, favorably situated, have outdoor nature trails where trees, shrubs, flowers, ferns, and minerals are labeled for identification or study. A few of the museums have small planetariums which show simply but not too accurately the position of the stars at various times and the movement of the planets.

Among the museums that work with children or maintain junior departments there are many whose content is incomparable; but their collections are often weighted heavily in some one direction. Even so, however, a balance is often struck by reason, in the museums of art especially, of the extensive practice of temporary loan exhibitions.

Almost all of the children's museums as well as the junior and adult museums have materials for circulation by loan to schools, churches, clubs and societies, and in some cases to individuals. These materials vary greatly in variety and quality but in general the contents are comparable in quality to that upon exhibition. Practically the entire service to children of two large museums is through materials circulated to them. The prime service of one of the great state museums is through its circulating collections, both to children, mainly in schools, and to adults.

Circulating materials are of various kinds. Slide collections, now most usually the small colored slide on film, or the film strip, and collections of mounted pictures for display purposes form the largest part of the materials for circulation. Almost all of the smaller museums and many of the larger ones are dependent upon the use of motion picture film from rental sources for their general motion picture programs for children. There are few, if any, museums that do not have at least 16 mm. sound projectors. Portable dioramas, either three-dimensional miniatures of the museum's full-sized habitat groups, or cut-outs set up in diorama form, or representational dioramas, are quite general. They are usually set up in wooden boxes, similar to suitcases, and often are equipped with electric bulbs and light cords so that they can be interiorly illuminated. There are many variations of the diorama and diorama case, but in all types the purpose is the same, namely to develop a way of taking small portions of the museum to the user. Cased collections are frequently found. These are often small portions of permanent collections in the museums that are set up for study purposes. They bear titles such as "Rodent Teeth", "Claws and Paws", "Sea Shells of the Florida Coast", "The Story of Cotton", "Birds of Spring", and so on. In some places small boxes or suitcases filled with artifacts are supplied for study purposes. These may be "Crafts of the Philippines", "African Carvings" and the like. A few museums develop more elaborate exhibits in a series of cases with titles such as, "Varying Cultures of the American Indian", "Man and His Tools", and "Atomic Energy". In a great many places the cased collections for circulation consist mainly of single specimens such as mounted birds or animals. In several museums recordings are available for loan, and in two there are transcriptions of radio programs, together with accompanying colored slides.

In many museums their circulating collections are mainly used

to serve the schools, or are used only within a nearby and limited area. In such cases there is rarely a charge for the loan and it is usual for the borrower to call for the material at the museum and to return the loan to the museum after a limited time. Several of the larger museums maintain rather elaborate services that may encompass great distances for the transportation of motion pictures, slides, or specimens. In the case of collections of art materials it is common practice for the originating museum to charge a fee for the loan, and the borrower generally pays the charges for transportation of the loan in both directions and such additional charges (for packing, insurance, draying, and the like) as may be incurred. In all but one case, that of a large state university, all charges for the transportation of circulating collections, dioramas, cases, pictures, motion picture film, slides, or whatnot, are borne by the borrower, whether sent by mail, express, or by truck. As a rule liability for loss or damage must be borne by the borrower, although there is much irreplaceable material circulating among museums. In the experience of the largest lenders there is an extraordinarily small amount of loss or damage.

V

PROGRAMS

Although in most cases the programs of the museums are designed for children, they are, because of the very nature of the museum itself, built about a core that is the material of the museum. There are, then, two aspects of the material that can be and that are dealt with, namely, on the one hand the material itself, its characteristics, its occurrence, its character, its properties and so on, and, on the other hand, the meaning of the material in relation to some phase of understanding outside itself. The one may be thought of as direct learning, and the other as interpretative. Both forms are directives in program building.

Among the programs devoted to direct learning by children there are two general types, those that are developed for dealing with groups, and those that are designed for individuals. The direct programs for groups deal largely on school days and during school hours with schools, and in after-school hours and on Saturday mornings (and occasionally afternoons) with special interest

groups (5). The school groups constitute a large and an almost universal service. Wherever a museum is located almost without exception the schools make use of its contents, and usually for direct teaching and learning. Because of the limited staffs of all the museums and the great demands upon them, all museums have established some form of registration of class groups ahead of time so that schedules can be prepared and personnel and materials can be made available at needed times. A few museums try to prepare teachers and classes for the visit to the museum so as to make the time spent of greatest benefit. One method is to prepare the teacher in advance, either through a general instruction class to which the teacher is urged to go, or through a required visit to the museum for a conference with a member of the museum staff prior to the class visit. Both of these methods have high value but are difficult to develop universally throughout a teaching corps. Because of the great demands upon teachers' time it is difficult to persuade large numbers of them, under present conditions, to take the extension work necessary to become expert in the museum material; and the pre-class visit is difficult to arrange and costly in time and effort. An alternative attempt that has value is used in several museums. A question sheet is prepared that emphasizes the points to be brought out by the pupils' visit and this is considered item by item with the pupils. In some museums this sheet is sent to the teacher some days before the projected visit, and in other museums the pupils spend a short time discussing the matter at the museum before spending time in the halls. Either method requires patient and thorough consideration to be of value.

In after-school hours the facilities of all of the children's museums are devoted to programs for non-school groups and for individual children. In group programs these museums and some museums of science or natural science and anthropology provide for museum "clubs", whereas in the museums of art the group programs are generally classes where the children do individual work under group direction. The museum club as a rule is a small group of children interested in some phase of work in which the museum has material or opportunity such as a "Mineralogy

(5) In the United States and Canada the school season usually extends from early September to the middle or end of June. The school week is Monday to Friday, inclusive. The school day is a variable, but is generally of about six hours in length, often with added time for a luncheon period. 8:30 A.M. to 3:00 P.M. is general.

Club", an "Insect Club", a "Photographic Club", a "Bird Club" and so on. This group meets at regular intervals and devotes its time to collecting, studying, classifying and preparing for exhibition the materials which its members have interest.

The direct forms of learning carried on for individuals are usually of sub-curatorial type in the children's museums, in which children are encouraged to follow through with primary interests, to learn honest scientific methods of study, and to investigate at first hand the characteristics and properties of real materials so as to draw personal conclusions. All of this is, of course, done under the guidance and, when well done, the indirect direction, of members of the museum staffs. The course of events with any child varies, but in general he is led from a general interest or liking to one that is specific and direct. This, in turn, may lead to collecting outside the museum (in the case of some fields, such as birds, possibly to recorded observation), to guidance within the museum in study and annotation, to classification, and frequently, to preparation of materials for personal use, such as herbaria, or for exhibition or display.

In the museums other than children's museums these individual forms of direct learning are rarely attempted, partly because of lack of space and staff for such work, and partly because if space and leadership is available it is used for the interpretative type of program.

The interpretative programs are also designed both for groups and for individuals. Interpretative work with the schools is rather rare, partly because there are great pressures when children visit the museums to have the materials treated in direct fashion as a part of the specific school curriculum, partly because few museums are so broad in scope as to provide the extraordinary breadth of material needed for interpretative teaching, and partly because direct teaching is easier and teachers are accustomed to it. In the art museums particularly and in the children's museums much fine work is carried on with groups the greater part of which is devoted to crafts and craft technics, although many museums have a weekly "story hour" for the pleasure and interest of little children (6). There are many opportunities for both group and

(6) Many museums have a real problem in developing individual work with children because small brothers and sisters accompany their elders to the center. In many places a nursery or kindergarten type of supervision is a necessity.

individual work in ceramics, in photography, in jewel cutting and polishing, in home-crafts, such as weaving, caning, rug hooking, work in leather or parchment, and the like, and in a multitude of activities of specific interest to boys and girls, such as model airplane building, making of radios or other electrical equipment, casting and polishing plastics, painting and drawing and the infinite variety of products resulting. In several instances museums have small presses, and children are able to write, set, and print their own news bulletins, as well as labels and posters.

The technics used by museums to carry their group programs are many, varied and ingenious. Much of the method used is, of course, exposition and questioning, with "gallery" talks carried on by lecturers. It is quite usual to find children gathered together in classrooms or auditoriums when they enter the museum in groups for preliminary discussion of what they are likely to see and do. It is less usual to have a similar period for discussion and summary at the close of visitation. Many technics are based on the length of time a child is likely to be in the museum and the breadth of purpose that he or his leaders may have. In the larger cities and the larger museums it is customary for pupils to visit for either a half or a whole day, whereas in the smaller museums an hour is generally the time allowed for classes. The reason for this lies less in the amount or quality of material than in the fact that in the larger cities the effort both in time and money is much greater than in the smaller cities where often most of the pupils are within easy walking distance. For the same reasons the pupils in the larger cities tend to visit the museum (as class groups) less often than in the smaller places. In the smaller museums, however, there is a growing demand for visitation from the near-by rural consolidated schools. Since most of these schools are served by motor buses that are for the exclusive use of the pupils and their teachers, and since these buses are otherwise idle during the hours that schools are in session, there is increasing use of them to transport pupils on field trips and to museums.

In those museums where weather permits, as it does for most of the museums along the southern tier of the United States most of the time, and for other museums in the early fall or late spring, field trips are common practice. Many museums carry on field trip programs, or day-camp programs as they are sometimes called,

during the summer season when the common schools are not in session.

The financing of the transportation of pupils to and from museums is often a source of difficulty and is solved in many ways, dependent upon the facilities available and the need. In smaller communities, as has been said, walking to and from the museum is the rule, and this applies to schools close to museums in the larger centers. There, however, distances from more remote schools are frequently great and walking is impractical. Where transportation is publicly (usually municipally) owned, children are generally permitted to ride without charge to and from the museums by whatever mode of transportation is available, bus, street-car, or subway. This privilege is confined to certain morning and afternoon-hours, and the class groups are usually required to be accompanied by more than one adult. It is quite usual for several parents to go with a group. The problem of risk or liability for injury to pupils is frequently a deterrent to this form of visitation, since in many states the liability of school divisions ceases when pupils are off school property, even though under the direction of school officials. In such cases the teacher himself is legally liable in case of accident, and it therefore becomes a rule that teachers require the written permission of the parent for a child to make the trip and the consequent assumption of liability by the parent. Where transportation is not publicly owned it is rare that charges are waived by the companies in the interests of the school pupils or of the school programs. Under such circumstances each pupil pays his own way, and there is generally some means provided to relieve the embarrassment of pupils who are unable to do so.

In many places the individual aspects of interpretative programs are indistinguishable from their group aspects, since the products of either are the same. In any event it probably makes little difference in the end whether a child works by himself or in a group if he is working for a product that he himself recognizes and wants, and the matter of whether it is done as a part of a group or alone is largely a matter of administration. Certain museums have done much to stimulate more or less independent activity on the part of children without the incentive or pressure of group participation. To this end the staffs have prepared many devices that act as stimuli to activity and lead children to seek answers to problems or questions, in the pursuit of which it may be hoped that they learn how to question and answer for

themselves, one goal common to almost all forms of education. Some of these devices are often called games, but the game element is largely a challenge to one's self rather than rivalry of someone else, and the learning consists in completing the question, matching the part of the puzzle to another part, as in a jigsaw puzzle, filling in a form by seeking the answer in given exhibits, replacing missing parts, removing surplus factors and the like. Such devices on low levels occasionally become mere sensory activities, but if the subtleties increase with the ability of the children to understand and react to them they may become highly educative and on the highest levels resemble research. Other devices consist of indoor explorer or treasure-hunting trails. There are many variants of this device, in which the central core is about the same, namely a written set of clues or questions that point a "trail" or path through the museum from which a child can make his own deductions or interpretations. In many museums efforts are made to stimulate such individual exploring, or activity with games, question boards, or similar devices, or production of finished products, by rewards or recognitions. In some cases these are elaborate and progressive from stage to stage, with some final, (or terminal) recognition of importance. In one instance a local newspaper offers rather substantial prizes for completion of various units, in another the museum holds "recognition" days, in another the names of children are published from time to time in a local bulletin, and in several museums there is a practice of having an annual temporary exhibit of the products of the work of individual children.

As may be noted there is no single form or pattern in the museums of the Americas in dealing with children, neither is there a universally accepted philosophy nor a common purpose. Throughout, however, there is a common ideal, that accounts for the indefatigable work of the staffs, the interest of the sponsors, the cooperation of the parents, the recognition of the value of museum work by the community, and the active participation of hundreds of thousands of children; namely, "Ye shall know the truth, and the truth shall make you free".

LIST OF MUSEUMS CONDUCTING CHILDREN'S WORK

This list which inevitably does not fully cover a certain number of countries has been compiled with the help of Mme Cart, P. Floud and C. Russell.

AUSTRALIA

Adelaide

Adelaide Children's Museum
North Terrace
Adelaide.

Perth

Western Australian Museum
Beaufort Street
Perth.

Sydney

The Australian Museum
College Street
Sydney

AUSTRIA

Graz

Landesmuseum Joanneum
Raubergasse 10
Graz.

Vienna

Graphische Sammlung Albertina
Augustinerbastei 6
Wien (1).

BELGIUM

Brussels

Institut Royal des Sciences Natu-
relles
(Service éducatif)
31, rue Vautier
Bruxelles.

Musée Royal d'Histoire Naturelle
de Belgique
31, rue Vautier
Bruxelles (3).

Musées royaux d'art et d'histoire
(Service éducatif)
Parc du Cinquenaire
Bruxelles.

CANADA

Ottawa

National Gallery of Canada
Ottawa.

National Museum of Canada
Ottawa.

Quebec

Museum of the Province of Quebec
Plains of Abraham
Quebec.

Saint John

The New Brunswick Museum
Douglas Avenue
Saint John, N. B.

Toronto

Royal Ontario Museums
(Extension Department)
100 Queen's Park
Toronto (5).

CHILE

Santiago

Museo Historico Nacional
Casilla 9764
Santiago.

DENMARK

Copenhagen

National Museet
København.

Odense

Hans Andersen's House
Odense.

EIRE

Dublin

Royal Zoological Society of Ire-
land
Phoenix Park
Dublin.

FRANCE

Paris

Musée de l'Homme
Palais de Chaillot
Paris (16^e).

Musée du Louvre
(Educational service for all the
national museums)
Direction des Musées de France
Palais du Louvre
Paris (1^{re}).

Musée Pédagogique
29, rue d'Ulm
Paris (5^e).

Palais de la Découverte
Avenue Franklin-Roosevelt
Paris (8^e).

ICELAND

Reykjavik

Natturugripasafnid
P. O. Box 532
Reykjavik.

IRAQ

Baghdad

Iraq Museum
Baghdad.

NETHERLANDS

Amsterdam

Koninklijk Instituut voor de Tro-
pen
(Educational Service)
Mauritskade 64
Amsterdam.

Museum van Koninklijk Instituut
voor de Tropen
Linnaeusstraat 2
Amsterdam.

Rijksmuseum
Stadhouderskade 42
Amsterdam (2).

Stedelijk Museum
Paulus Potterstraat 13
Amsterdam.

Zoölogisch Museum van Amster-
dam
Plantage Middellaan 53
Amsterdam.

Gouda

Stedelijk Museum « het Catharina-
Gasthuis »
Oosthaven 10
Gouda.

Groenlo

Grolsch Museum
Lievelderstr. A 53
Groenlo.

Groningen

Geologisch-Mineralogisch Instituut
Melkweg 1,
Groningen.

Leiden

Stedelijk Museum "De Lakenhal"
Oude Single 32
Leiden.

Nijmegen

Museum Canisiuscollege
Bergendalscheweg 81
Nijmegen.

Rotterdam

Museum voor Land-en Volken-
kunde
Willemskade 25
Rotterdam.

Schiedam

Stedelijk Museum
Hoogstraat 112
Schiedam.

Sneek

Fries Scheepvaart Museum
Kleinzand 12
Sneek, Friesland.

St. Michielsgestel

Natuurhistorisch Museum van het
R. K. Seminarie Beekvliet
Beekhaut B 123
St. Michielsgestel.

The Hague

Gemeentemuseum. Dienst voor
Schone Kunsten
Stadhouderslaan 41
Den Haag.

Museum voor het Onderwijs
Hemsterhuisstraat 2 E
Den Haag.

The Helder

Museum den Helder
2e Vroonstraat
Den Helder.

Tilburg

Natuur-Historisch Museum
Paleisstr. 20
Tilburg.

Utrecht

Museum ten dienste van het On-
derwijs
Nieuwe Gracht 41
Utrecht.

NORWAY

Bygdoy

Norsk Folkmuseum
(Educational service)
Bygdoy ved Oslo.

Oslo

Nasjonalgalleriet
Universitetsgt. 13
Oslo.

Norsk Folkemuseum
Oslo.

Stavanger

Stavanger Museum
Stavanger.

PAKISTAN

Dacca

Dacca Museum
5 Seretariat Road
Ramna, Dacca.

Rajshahi

Varenda Research Society Museum
Rajshahi.

POLAND

Warsaw

Muzeum Narodowe
Al. gen. Sikorskiego 3
Warszawa.

SWEDEN

Falun

Bergslagens Museum
Falun.

Gothenburg

Konstmuseum
Götaplatsen
Göteborg.

Röhsska Konstsöjdmuseet
Vasagatan 37-39
Göteborg.

Malmö

Malmö Museum
Malmö.

Stockholm

Armémuseum
Riddargatan 13
Stockholm.

Musikhistoriska Museet
Floragatan 3
Stockholm.

Nationalmuseum
Södra Blasieholmshamnen
Stockholm.

Nordiska Museet
Djurgården
Stockholm.

Skansen
Skansen, Stockholm.

Stadsmuseum
(Educational service)
Götgatan
Stockholm.

Statens Etnografiska Museum
Museivägen, Djurgården,
Stockholm.

Statens Historiska Museum
(Educational service)
Storgatan 41,
Stockholm.

Stockholms Stadsmuseum
Götgatan 1
Stockholm.

Tekniska Museet
Museivägen, Djurgården
Stockholm O.

SWITZERLAND

Basel

Zoologischer Garten
Birsigstrasse 51
Basel.

Bern

Naturhistorisches Museum
Bernstrasse 15
Bern.

Schweizerisches Schulmuseum
2, Helvetiaplatz
Bern.

TASMANIA

Hobart

Tasmanian Museum
Hobart.

UNITED KINGDOM

Aberdeen

Aberdeen Art Gallery and Industrial Museum
Schoolhill
Aberdeen.

Belfast

Municipal Museum and Art Gallery,
Stranmillis

Bristol

City Art Gallery
Queen's Road
Bristol.

City Museum
Queen's Road,
Bristol.

Cambridge

Cambridge and County Folk Museum
2, Castle Street
Cambridge.

Cardiff

Amgueddfa Genedlaethol cymru
National Museum of Wales,
Cardiff.

Dundee

Municipal Museum
Albert Institute
Dundee, Angus.

Edinburgh

Royal Scottish Museum
Chambers Street
Edinburgh 1.

Glasgow

Glasgow Art Gallery and Museum
Kelvingrove
Glasgow.

Tollcross Children's Museum
Tollcross Park
Glasgow

Haslemere

The Educational Museum
High Street
Haslemere, Surrey.

Hastings

Public Museum and Art Gallery
John's Place
Hastings, Sussex.

Hitchin

Hitchin Museum
Payne's Park
Hitchin, Herts.

Kilmarnock

Dick Institute
Kilmarnock, Ayr.

Leicester

City Museum and Art Gallery
New Walk
Leicester.

Letchworth

Letchworth Museum and Art Gallery
Broadway
Letchworth, Herts.

Liverpool

Liverpool Public Museums
Carnatic Hall, Elmswood Road
Liverpool (18).

London

Horniman Museum and Library
Forest Hill,
London (S.E.23).

Geffrye Museum
Kingsland Road
London (E2).

Geological Museum
South Kensington
London (S.W.7).

Imperial Institute
Imperial Institute Road,
South Kensington
London (S.W.7).

London Museum
Kensington Palace
London (W. 8.).

Natural History Museum
South Kensington
London (S.W.7).

The Science Museum
South Kensington
London (S.W.7).

Victoria and Albert Museum
South Kensington
London (S.W.7).

Luton

Luton Museum and Art Gallery
Wardown Park
Luton, Bedfordshire.

Maidstone

Museum and Public Library
Chillington Manor House
Maidstone, Kent.

Manchester

Horsfall Museum and Gallery
Every Street, Ancoats
Manchester.

Queen's Park Gallery
Harpurhey
Manchester (9).

Norwich

Norwich Castle Museum
Castle Meadow
Norwich, Norfolk.

Reading

Museum and Art Gallery,
Reading, Berks.

Rochester

Eastgate House Museum
High Street
Rochester, Kent.

Rothsay

Bute Museum
Sturat Street
Rothsay, Buteshire.

Salford

Royal Museum and Art Galleries
Peel Park
Salford 5, Lancashire.

Tenby

The Tenby Museum
Castle Hill
Tenby, Pembrokeshire.

Tottenham

Tottenham Museum
Lordship Lane n° 17, Bruce Castle
Tottenham, Midd.

Warwick

Warwick Museum
Warwick

York

York Castle Museum
(Education Service)
York.

JAMAICA

Kingston

Institute of Jamaica (Junior Cen-
tre)
Kingston.

U. S. A.

Type I. — Children's Museums.

Atlanta

Children's Nature Museum
849 Clifton Road, NE
Atlanta 6, Georgia

Amsterdam

Public School Museum
Perkins Street
Amsterdam, N.Y.

Baltimore

Junior Museum
Baltimore Museum of Art
Wyman Drive
Baltimore 18, Maryland.

Berkeley

Tahcoma Museum of Natural His-
tory
Camp Tahcoma Wildlife Refuge
Tilden Regional Park
Berkeley, Calif.

Boston

Children's Art Center, Inc.
38 Rutland Street
Boston, Mass.

Brooklyn

Brooklyn children, 5 Museum
Brooklyn Avenue and Park place
Brooklyn, N. Y.

Cambridge

Cambridge Museum for Children
Longfellow School
Broadway,
Cambridge 39, Mass.

Charlotte

Charlotte Children's Nature Mu-
seum
325 N. Cecil Street
Charlotte, North Carolina.

Colorado Springs

Colorado Springs Fine Arts Center
30 West Dale Street
Colorado Springs, Colorado.

Deatsville

Holtville Children's Museum
Deatsville, Alabama.

Denver

Children's Museum
Denver Art Museum
1300 Logan Street
Denver, Colorado

Detroit

Children's Museum of Detroit
5205 Cass Avenue
Detroit 2, Michigan.

Duluth

Duluth Children's Museum
1832 E. Second Street
Duluth 5, Minnesota.

Forth Worth

Forth Worth Children's Museum
1306 Summit Avenue
Fort Worth, Texas.

Hartford

Children's Museum of Hartford,
Inc.
609 Farmington Avenue
Hartford, Connecticut.

Indianapolis

Children's Museum of Indianapolis
3010 N. Meridan Street
Indianapolis 8, Indiana.

Jacksonville

Jacksonville Children's Museum,
Inc.
1061 Riverside Avenue
Jacksonville 4, Florida.

Jamaica Plain

Children's Museum
60 Burroughs Street
Jamaica Plain 30, Mass.

Kalamazzo

Kalamazzo Museum
355 S. Rose Street
Kalamazzo, Michigan.

Manchester

Currier Gallery of Art,
192 Orange Street
Manchester, New Hampshire.

Mishawka

Mishawka Children's Museum
Mishawka, Indiana.

Morristown

Morristown Children's Museum
Maple Avenue School
Morristown, New Jersey.

Nashville

Nashville Children's Museum
724 Second Avenue South
Nashville 10, Tennessee

Palo Alto

Palo Alto Junior Museum
1451 Middlefield Road
Palo Alto, California.

Pasadena

Pasadena Junior Museum
Pasadena Art Institute
46 N. Los Roblos
Pasadena 1, California.

San Francisco

Junior Museum
600 Ocean Drive
San Francisco 12, California.

San Pedro

Cabrillo Marine Museum
3720 Stephen M. White Drive
San Pedro, California.

Washington

Children's Museum of Washington
Western Avenue at Military Road,
NW
Washington 15, D.C.

Wilsonville

Travelling Museum of Shelby
County
Hornaday Memorial Foundation
Wilsonville, Alabama.

**Type II. — Adult Institutions
with Departments containing
Exhibits and activities for
Children**

Buffalo

Albright Art Gallery
1285 Elmwood Avenue
Buffalo, New York.

Dallas

Dallas Historical Society
Hall of State, Fair Park
Dallas 1, Texas.

Detroit

Detroit Institute of Art
5200 Woodward Avenue
Detroit, Michigan.

Houston

Museum of Fine Arts of Houston
Main and Montrose Boulevards
Houston 5, Texas.

Los Angeles

Los Angeles County Museum
Exposition Park
Los Angeles 7, California.

Montclair

Montclair Art Museum
3 South Mountain Avenue
Montclair, New Jersey

Montgomery

Montgomery Museum of Fine Arts
205 High Street
Montgomery, Alabama.

Newark

Junior Museum, Newark Museum
(Educational Director)
49 Washington Street
Newark 2, New Jersey.

New York

Children's Rooms of the New
York Public Library
476 Fifth Avenue
New York 18, N. Y.

Junior Museum, Metropolitan Mu-
seum of Art
Fifth Avenue at 82nd Street
New York, N. Y.

Norfolk

Norfolk Museum of Arts and
Sciences
Lee Park
Norfolk 7, Virginia.

Omaha

Joslyn Memorial Art Institute
(Educational Director)
2218 Dodge Street
Omaha, Nebraska.

Philadelphia

Philadelphia Museum of Art
(Educational Director)
26th and the Parkway
Philadelphia 30, Pa.

The University Museum
(Curator of Education)
33rd and Spruce Streets
Philadelphia 4, Pennsylvania.

Pittsburgh

Carnegie Museum
(Curator of Education)
4400 Forbes Street
Pittsburgh 13, Pa.

Pittsfield

The Berkshire Museum
Pittsfield, Massachusetts.

Providence

Art Museum of the Rhode Island
(Children's Program)
School of Design
224 Benefit Street
Providence, Rhode Island.

Reading

Reading Public Museum and Art
Gallery
Reading, Pennsylvania.

St. Louis

School of Nations Museum
The Principia
St. Louis, Missouri.

San Diego

The Fine Arts Gallery of San Die-
go
Balboa Park
San Diego 12, California

San Francisco

California Palace of the
Legion of Honor
Lincoln Park
San Francisco 21, California.

Springfield

Museum of Natural History
236 State Street
Springfield 5, Massachusetts.

Staten Island

Junior Museum, Staten Island Ins-
titute of Arts and Sciences
75 Stuyvesant Place
Staten Island 1, New York.

Trenton

New Jersey State Museum
Trenton, New Jersey.

Tuscaloosa

Alabama Museum of Natural His-
tory
University of Alabama
Tuscaloosa, Alabama.

Washington

Smithsonian Institution
Washington 25, D.C.

Wilmington

Delaware Art Center
Park Drive at Woodlawn Avenue.
Wilmington, Delaware.

**Type 3. — Adult Institutions
with School Service Depart-
ment but not Special Exhibits
for Children.**

Akron

Akron Art Institute
140 East Market Street
Akron, Ohio.

Albany

Albany Institute of History and
Art
(Children's Committee)
125 Washington Avenue
Albany, New York.

New York State Museum
State Education Building
Albany 1, New York.

Albuquerque

Museum of Anthropology
University of New Mexico
Albuquerque, New Mexico.

Alpine

Big Bend Memorial Museum
Box 128
Alpine, Texas.

Andover

Addison Gallery of American Art
Phillips Academy
Andover, Massachusetts.

Ann Arbor

University Museums
Ann Arbor, Michigan.

Auburn

Cayuga Museum of History and
Art.
Auburn, New York.

Baltimore

Walters Art Gallery
(Director of Education)
600 N. Charles Street
Baltimore, Maryland.

Bartlesville

Woolaroc Museum
Bartlesville, Oklahoma.

Baton Rouge

Louisiana Art Commission Gallery
Old State Capitol
Baton Rouge, Louisiana.

Bear Mountain

Bear Mountain Trailside Museums
Bear Mountain, New York.

Beloit

Theodore Lyman Wright Art Hall
Beloit College
Beloit, Wisconsin.

Bloomfield Hills

Cranbrook Institute of Science
Bloomfield Hills, Michigan.

Boston

Institute of Contemporary Art
138 Newbury Street
Boston 16, Massachusetts

Museum of Fine Arts
(Instructor)
465 Huntington Avenue
Boston, Massachusetts.

New England Museum of Natural
History
109 Chestnut Street
Boston, Massachusetts

New England Museum of the So-
ciety for the Preservation of
New England Antiquities
141 Cambridge Street
Boston 14, Massachusetts.

Brooklyn

Brooklyn Museum
(Curator of Education)
Eastern Parkway
Brooklyn 17, New York.

Buffalo

Buffalo Museum of Science
Humboldt Park
Buffalo 11, New York.

Cambridge

Semitic Museum, Harvard Univer-
sity
6 Divinity Avenue
Cambridge 38, Massachusetts.

Canton

Canton Art Institute
1717 Market Avenue North
Canton 3, Ohio.

Canyon

Panhandle-Plains Museum
Canyon, Texas.

Carbondale

Museum of Natural and Social
Sciences
Southern Illinois University
Carbondale, Illinois.

Charleston

Carolina Art Association
Gibbes Art Gallery
135 Meeting Street
Charleston, South Carolina.

Charleston Museum
Charleston 16, South Carolina.

Charlotte

Mint Museum of Art
Charlotte, North Carolina.

Chicago

Art Institute of Chicago
(Educational Dept.)
Chicago 3, Illinois.

Chicago Historical Society
Clark Street at North Avenue
Chicago 14, Illinois.

Chicago Natural History Museum
Roosevelt Road and Lake Shore
Drive
Chicago 5, Illinois.

Museum of Science and Industry
57th and South Shore Drive
Jackson Park, Chicago 37, Illinois.

Oriental Institute
University of Chicago
Chicago 37, Illinois.

Psychological Museum
Illinois Institute of Technology
3300 Federal Street
Chicago, Illinois.

Cincinnati

Cincinnati Art Museum
Eden Park
Cincinnati 6, Ohio.

Cincinnati Museum of Natural History
Central Parkway at Walnut Street
Cincinnati, Ohio.

Taft Museum
316 Pike Street
Cincinnati 2, Ohio.

Clearwater

Clearwater Art Museum, Inc.
Clearwater, Florida.

Cleveland

Cleveland Health Museum
8911 Euclid Avenue
Cleveland 6, Ohio.

Cleveland Museum of Art
(Supervisor of Children's classes)
East Boulevard
Cleveland 6, Ohio.

Cleveland Museum of Natural History
2717 Euclid Avenue
Cleveland 15, Ohio.

Western Reserve Historical Society
10915-10825 East Boulevard
Cleveland 6, Ohio.

Columbus

Columbus Gallery of Fine Arts
480 East Broad Street
Columbus 15, Ohio.

Ohio State Archaeological and
Historical Society Museum
High Street at 15th Avenue
Columbus, Ohio.

Concord

Concord Antiquarian Society
Cambridge Turnpike and Lexington Road
Concord, Massachusetts.

Cooperstown

Cooperstown Children's Museum
Cooperstown, New York.

Coshocton

Johnson-Humrickhouse Memorial
Museum
Sycamore Street at Third
Coshocton, Ohio.

Dallas

Dallas Museum of Fine Arts
Fair Park
Dallas, Texas.

Dayton

Dayton Public Library Museum
215 East 3rd Street
Dayton 5, Ohio.

Dearborn

The Edison Institute
Dearborn, Michigan.

Des Moines

State Department of History and
Archives
History Building
Des Moines 19, Iowa.

Detroit

Detroit Historical Museum
441 Merrick Street
Detroit 2, Michigan.

Elmira

Arnot Art Gallery
235 Lake Street
Elmira, New York.

Erie

Erie Public Museum
Sixth and Chestnut
Erie, Pennsylvania.

Eugene

Museum of Natural History
University of Oregon
Eugene, Oregon.

Evansville

Evansville Public Museum
216 NW Second Street
Evansville 8, Indiana.

Flint

Flint Institute of Art
215 W. First Street
Flint 3, Michigan.

Fort Ticonderoga

Fort Ticonderoga Museum
Fort Ticonderoga, New York.

Fort Wayne

Allen County-Fort Wayne Historical Museum
1424 Swinney Court
Fort Wayne, Indiana
Fort Wayne Art Museum
1026 West Berry Street
Fort Wayne, Indiana.

Freehold

Monmouth County Historical Association
70 Court Street
Freehold, New Jersey.

Fremont

Hayes Memorial
Fremont, Ohio.

Geneva

Geneva Nature Museum
Junior School
Geneva, New York.

Grand Rapids

Grand Rapids Public Museum
Washington and Jefferson Avenues
Grand Rapids, Michigan.

Green Bay

Neville Public Museum
129 South Jefferson Street
Green Bay, Wisconsin.

Greensboro

Greensboro Historical Museum
Richardson Memorial Civic Center
220 Church Street
Greensboro, North Carolina.

Hagerstown

Washington County Museum of Fine Arts
Hagerstown, Maryland.

Hanover

Dartmouth College Museum
Hanover, New Hampshire.

Harrisburg

Fort Hunter Museum
R.D.2
Harrisburg, Pennsylvania.

Hartford

Art Museum, Wadsworth Athenaeum
Hartford 3, Connecticut.

Hastings

Hastings Museum
House of Yesterday
Hastings, Nebraska.

Holland

Netherlands Museum
Holland, Michigan.

Houston

Museum of Natural History
Box 2075
Houston, Texas.

Indianapolis

John Herron Art Museum
16th and Pennsylvania Streets
Indianapolis, Indiana.

Iowa City

Museum of Natural History
State University of Iowa
Iowa City, Iowa.

Irvington

Children's Museum in Irvington
64 Main Street
Irvington, New York.

Jefferson City

Missouri Resources Museum
State Capitol Building
Jefferson City, Missouri.

Kansas City

Kansas City Museum
3218 Gladstone Boulevard
Kansas City Missouri

William Rockhill Nelson Gallery
of Art and Atkins Museum
4525 Oak Street
Kansas City 2, Missouri.

Kennebunk

The Brick Store Museum
117 Main Street
Kennebunk, Maine.

Lansing

Michigan State Historical Museum
505 N. Washington Avenue
Lansing, Michigan.

Laurel

Lauren Rodgers Library and Museum of Art
Laurel, Mississippi.

Laurence

Museum of Natural History
University of Kansas
Laurence, Kansas.

Lincoln

University of Nebraska Art Galleries
Morrill Hall
14th and U Streets
Lincoln 8, Nebraska.

Louisville

J. B. Speed Art Museum
Third and Shipp Streets
Louisville 8, Kentucky.

Lowell

Whistler's Birthplace
243 Northern Street
Lowell, Massachusetts.

Massillon

Massillon Museum
212 Lincoln Way E
Massillon, Ohio.

Milwaukee

Milwaukee Art Institute
772 North Jefferson
Milwaukee 2, Wisconsin

Milwaukee Public Museum
(Curator of Education)
818 West Wisconsin Avenue
Milwaukee 3, Wisconsin.

Minneapolis

Minneapolis Institute of Art
201 E 24th. Street
Minneapolis 4, Minnesota.

Museum of Natural History
University of Minnesota
Minneapolis 14 Minnesota.

University of Minnesota Art Gallery
Minneapolis 14, Minnesota.

Walker Art Center
1710 Lyndale Avenue
Minneapolis 5, Minnesota.

Moorestown

Thunderbird Museum
Mt. Laurel Road
Moorestown, New Jersey.

Morristown

Morristown National Historical Park
Box 749,
Morristown, New Jersey.

Mystic

Marine Museum
(Educational Director)
Mystic, Conn.

Pequot-sepos Wildlife Sanctuary
Mystic, Connecticut.

New Bedford

Old Dartmouth Historical Society
and Whaling Museum
New Bedford, Massachusetts.

New Brunswick

Geology Museum of Rutgers University
New Brunswick, New Jersey.

Newburgh

Washington's Headquarters and Museum
74-78 Liberty Street
Newburgh, New York.

New Haven

Peabody Museum of Natural History
Yale University
New Haven, Conn.

Yale University Art Gallery
New Haven, Conn.

New London

Lyman Allyn Museum
100 Mohegan Avenue
New London, Conn.

New Orleans

Isaac Delgado Museum of Art
City Park
New Orleans 19, Louisiana.

Newport News

Mariner's Museum
Newport News, Virginia.

War Memorial Museum of Virginia
Newport News, Virginia.

New York

American Museum of Natural History
Central Park West at 79th Street
New York 24, New York.

Chase National Bank Collection
46 Cedar Street
New York 15, New York.

Museum of Modern Art
(Director of Education)
11 West 53rd Street
New York 19, N.Y.

Museum of Non-Objective Painting
1071 Fifth Avenue
New York, N.Y.

Museum of the American Indian
Heye Foundation
Broadway at 155th
New York 32, N.Y.

New York Historical Society
(Junior Supervisor of Education)
Central Park West at 77th Street
New York 24, N.Y.

New York Zoological Society
New York Zoological Park
New York 60, N.Y.

Norfolk

Hermitage Foundation
North Shore Road, Lochaven
Norfolk 8, Virginia.

Norman

University Museum
Norman, Oklahoma.

Norwich

Slater Memorial Museum
Norwich Free Academy
Norwich, Connecticut.

Notre-Dame

Science Museum
University of Notre-Dame
Notre-Dame, Indiana.

Oberlin

Allen Memorial Art Museum
(Librarian and Instructor)
Oberlin College
Oberlin, Ohio.

Olympia

State Capitol Historical Association
211 West 21st Street
Olympia, Washington

Paterson

Paterson Museum
268 Summer Street
Paterson, New Jersey.

Philadelphia

Academy of Natural Sciences
19th and the Parkway
Philadelphia 3, Pennsylvania.

American Swedish Historical Museum
19th and Pattison Avenue
Philadelphia 45, Pennsylvania.

Commercial Museum
34th below Spruce Street
Philadelphia 4, Pennsylvania

Franklin Institute Museum
(Director of Education)
20th and the Parkway
Philadelphia 3, Pennsylvania.

Pittsburgh

Buhl Planetarium and Institute of
Popular Science
Federal and West Ohio Streets
Pittsburgh 12, Pennsylvania.

Portland

Portland Art Museum
SW Park and Madison
Portland, Oregon.

School of Fine and Applied Art
(The Instructor)
97 Spring Street
Portland, Maine.

Providence

Roger Williams Park Museum
Providence, Rhode Island.

Richmond

Valentine Museum
1015 East Clay Street
Richmond, Virginia.

Virginia Museum of Fine Arts
Richmond, Virginia.

Riverhead

Suffolk County Historical Society
West Main Street
Riverhead, Long Island, N.Y.

Rochester

Memorial Art Gallery
(Director of Education)
University of Rochester
University Avenue
Rochester 7, N.Y.

Rockland

Farnsworth Library and Art Museum
Elm Street
Rockland, Maine.

Saginaw

The Saginaw Museum
1126 N. Michigan Avenue
Saginaw, Michigan.

St. Johnsbury

Fairbanks Museum of Natural Science
St. Johnsbury, Vermont.

St. Joseph

St. Joseph's Museum
11th at Charles Street
St. Joseph 13, Missouri.

St. Louis

Academy of Science of St. Louis
Museum of Science
4642 Lindell Boulevard
St. Louis 8, Missouri.

City Art Museum of St. Louis
Forrest Park
St. Louis 5, Missouri.

Division of Audio-Visual Education
4466 Olive Street
St. Louis 8, Missouri.

St. Paul

Minnesota Historical Society
St. Paul 1, Minnesota.

The Science Museum
51 University Avenue
St. Paul 3, Minnesota.

San Antonio

Witte Memorial Museum
Brackenridge Park
San Antonio 9, Texas.

Santa Fe

Museum of Navajo Ceremonial Art
Santa Fe, New Mexico.

Schenectady

Schenectady Museum
37 Steuben Street
Schenectady 7, N.Y.

Scranton

Everhart Museum
(Curator of Education)
Nay Aug Park
Scranton 10, Pennsylvania.

Seattle

Seattle Art Museum
(Director of Education)
Volunteer Park
Seattle, Washington.

Washington State Museum
University of Washington
Seattle, Washington.

South Bend

Northern Indiana Historical Society
112 South Lafayette Boulevard
South Bend, Indiana.

Springfield

Illinois State Museum
Second and Jackson Streets
Springfield, Illinois.

George Walter Vincent Smith Art Museum
222 State Street
Springfield 5, Massachusetts.

Museum of Fine Arts
49 Chestnut Street
Springfield 5, Massachusetts.

Springfield Art Museum
Springfield, Missouri.

Sturbridge

Old Sturbridge Village
Sturbridge, Massachusetts.

Syracuse

Syracuse Museum of Fine Arts
407 James Street
Syracuse 3, New York.

Syracuse Museum of Natural Science
Lyman Hall, Syracuse University
Syracuse, New York.

Terre Haute

Shelden Swope Art Gallery
Terre Haute, Indiana.

Toledo

Toledo Museum of Art
Toledo 2, Ohio.

Tulsa

Philbrook Art Center
(Educational Director)
2727 Rockford Road
Tulsa, Oklahoma.

Utica

Munson-Williams-Proctor Institute
312-318 Genesee Street
Utica 4, New York.

Waltham

Gore Place
Waltham 54, Massachusetts

Washington

Corcoran Gallery of Art
Washington 6, D.C.

West Palm Beach

Norton Gallery and School of Art
Pioneer Park
West Palm Beach, Florida.

Wichita

Wichita Art Association
401 N. Belmont Avenue
Wichita, Kansas.

Wilmington

Historical Society of Delaware.
Old Town Hall
Wilmington 24, Delaware.

Williamsburg

Colonial Williamsburg
(Director of Education)
Goodwin Building
Williamsburg, Virginia.

Worcester

Museum of Natural History
12 State Street
Worcester, Massachusetts.

Worcester Art Museum
(Curator of Education)
55 Salisbury Street
Worcester 8, Massachusetts.

Yonkers

Hudson River Museum at Yonkers
Trevor Park
Yonkers, New York.

Youngstown

Butler Art Institute
524 Wick Avenue
Youngstown, Ohio.

Zanesville

Art Institute
Maple and Adair Avenues
Zanesville, Ohio.

HAWAII

Honolulu

Honolulu Children's Museum
P.O. Box 3530
Honolulu 11.

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